REPORT

OF

ARCHÆOLOGICAL SURVEY WORK

IN THE

NORTH-WEST FRONTIER PROVINCE

AND

BALUCHISTAN

FOR THE

PERIOD FROM JANUARY 2nd TO MARCH 31st 1905.

BY

M. A. STEIN PhD

INSPECTOR-GENERAL OF EDUCATION AND ARCHAEOLOGICAL SURVEYOR

NORTH-WEST FRONTIER PROVINCE AND BLAUCHISTAN

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TABLE OF CONTENTS.

ILLUSTRATIONS.

PLANS.

Proceedings of the Hon'ble the Agent to the Governor-General and Chief Commissioner, North-West Frontier Province, No. 1650-G., dated 13th September 1905.

READ—

The Report of Archæological Survey work in the North-West Frontier Province and Baluchistan for the period from 2nd January 1904 to 31st March 1905.

REMARKS.—This review deals only with that portion of the Report referring to work done in the North-West Frontier Province. The Report speaks for itself of Dr. Stein's indefatigable industry and of the wide range of his erudition, and the Chief Commissioner, while recognizing the prior claims of other and wider archæological interests, cannot permit the present occasion to pass without deploring the loss which archæology in the North-West Frontier Province will sustain on Dr. Stein's departure.

2. Perhaps the most interesting chapters of the Report are those dealing with Dr. Stein's visit to Mahaban and Banj in Gadun territory—an expedition which had archæological results of the first value.

3. The length of the Report and the occasional tendency to prolixity may well be pardoned in the present instance, for in marked contrast to most other official literature it has an interest which is neither purely technical nor merely ephemeral.

ORDER.—Ordered, that the above Review be circulated with the Report and submitted with the usual number of copies of the Report to the Government of India in the Home Department. Also that a copy be forwarded to the Archæological Surveyor, North-West Frontier Province and Baluchistan, for information.

By order of the Hon'ble the Agent to the Governor-General and Chief Commissioner,

E. B. HOWELL,

Assistant Secretary to the Hon'ble the Agent to the Governor-General and Chief Commissioner, North-West Frontier Province.

REPORT

OF

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BALUCHISTAN

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PERIOD FROM JANUARY 2nd 1904 TO MARCH 31st 1905

PART I.

1. In accordance with a recommendation of the Government of India approved by His Majesty's Secretary of State for India in Despatch No. 81 Public (Education), dated 10th July, 1903, I was appointed to the newly created combined posts of Inspector-General of Education and Archæological Surveyor for the North-West Frontier Province and Baluchistan. In combining the two appointments consideration was paid to the special qualifications acquired by me through my previous antiquarian researches on and beyond the North-West Frontier, and accordingly this combination was to be considered personal to my case. I took charge of my duties in the combined posts on the 2nd of January, 1904, on my return from special duty in England.

2. During my first period of office now under report, my archæological activity was inevitably limited by the heavy administrative duties entailed in the organization and regular inspection of educational institutions throughout the two Provinces. On the one hand the separation of the Education Department in the North-West Frontier Province from that of the Punjab, which took place upon my assuming charge of the newly created posts, was necessarily attended by a number of initial changes which involved additional labour; on the other hand it also became necessary during this period to take in hand the organization of an Educational Department in Baluchistan, the schools of which had previously not been subject to regular departmental control. The urgently needed appointment of subordinate officers to assist me in each of the two Provinces could not be secured until near the close of the period under report, and I was thus obliged practically to the close of a second inspection season to carry on single-handed the multifarious and responsible educational duties which in other Provinces are divided between the Director of Public Instruction and the Inspectors of Schools.

3. It has appeared to me desirable to indicate these special difficulties on the educational side of my first period of office as they explain the limitations I was obliged, however reluctantly, to impose upon my archæological activity. The season laid down for the annual inspection of schools coincides with that period of the year when exploratory work in the field, especially excavation work, is alone practicable in the archæologically important portion of the two Provinces. Until the appointment of two Personal Assistants towards the close of the last official year gave some relief, it would have been impossible for me to undertake excavation labours, requiring for their satisfactory conduct prolonged presence at the site and constant supervision, without the risk of serious

injury to the educational interests entrusted to my charge. Intense as were the scholarly interests which have drawn me for a long series of years past towards the remains still awaiting discovery below the soil of ancient *Gandhara* and *Udyana*, it would have been equally impossible either to overlook for their sake practical administrative interests or to undertake antiquarian tasks which I could not expect to carry through with all the care and thoroughness demanded by the standards of scholarly exploration.

There was a further important consideration precluding me during the period under review from any attempt at excavations. Apart from the time spent in directing and supervising them, excavations would necessarily have claimed a good deal of time and labour for the proper study and description of their results. But this I should not have been able to spare without very seriously delaying the publication of my Detailed Report on the archæological results of my explorations in Chinese Turkestan. The early completion of this heavy task is, I believe, recognized by every competent fellow-scholar as the most important service I can render at present to the cause of Indian archæological research, and I accordingly felt obliged to concentrate upon it, with the concurrence of the Hon'ble the Chief Commissioner, whatever leisure I could spare during the summer months, the only period when other official work would permit of continued scholarly application.

4. The considerations here indicated will, I trust, be sufficient to explain why the archæological labours I have been able to carry on during the period under report were, apart from the last mentioned task, mainly directed towards surveys of such ancient sites, hitherto unexplored or only imperfectly described, as could be reached and examined by me in the course of inspection tours or during relatively short periods when it was possible for me to leave behind office work and inspection duties. I must consider it a particularly fortunate circumstance that, thanks to the special help afforded to me by the Hon'ble the Chief Commissioner, Colonel H. A. Deane, C.S.I., I was able to extend these surveys to a region of exceptional antiquarian and historical interest, the Mahaban Range.

Owing to its position in tribal territory beyond the north-east border of the Peshawar District this hill tract had hitherto been inaccessible to Europeans, and had remained a *terra incognita* to the archæologist as well as the topographer. The successful trans-border tour, described in Sections v.—ix. of Part II of this Report, has led to the discovery of several important sites and to the elucidation of questions of great interest for the history and ancient geography of Gandhara. It has served besides geographical interests, inasmuch as an area of over 200 square miles hitherto unsurveyed was carefully mapped under my supervision by Surveyor Rai Lal Singh, whose services Colonel F. B. Longe, R. E., Surveyor-General of India, had been kind enough to place at my disposal.

In connection with this tour I must record my deep obligation to the Hon'ble Colonel H. A. Deane, who himself keenly interested in the archæology of the Frontier, had from the first encouraged my long-cherished hope of exploring Mahaban, and who, when the opportune moment arrived for the execution of the plan, readily accorded both official sanction and the means needed for securing the ready co-operation of the tribes. I may also express here my sincere gratitude to Mr. P. J. G. Pipon, C. S., then Assistant Commissioner, Mardan, for the very zealous way in which he laboured to bring about the tribal settlement that had to precede the enterprise, and for the care he took to obviate any obstacles arising to the full execution of my programme.

5. The ancient sites which I was subsequently able to survey during my tours in Baluchistan could not claim similar historical and antiquarian importance; but they offered the special interest of belonging to ground which had from an archæological point of view never been systematically examined before, and which had manifestly derived whatever it possessed of early civilization far more from the Iranian than the Indian side. My marches, extending from the desert plains of Kharan in the south-west to Loralai and Thal in the north-east, gave ample opportunities also for interesting geographical observations which have a close bearing on the historical aspects of this border land.

They will be very helpful whenever the time comes to prepare the account of the ancient geography of Northern India with which I have been entrusted for the "Encyclopædia of Indo-Aryan Research." My archæological enquiries in Baluchistan were greatly facilitated by the information concerning old mounds, traditions, &c., which Mr. R. HUGHES BULLER, Superintendent of the Baluchistan Gazetteer, had collected with much zeal. For the liberality with which he placed this information at my disposal, as well as for the guidance and help accorded to me in other ways, I may be allowed to offer here my sincere thanks.

6. The special conditions under which my archæological work was carried on during this first period would not have justified the expense involved in the employment of a permanent establishment. Whatever surveys of ancient remains I was able to undertake were carried out by myself without special assistance. The only exception to this rule was my Mahaban tour, when, in view of the rapidity of work indicated by political considerations, a temporary assistant in the person of Subadar Jagat Singh, a pensioned Military Surveyor, was employed to assist me in making plans of ruined sites, &c. On the same occasion I received very useful assistance in the same direction also from Rai Lal Singh, of the Survey of India Department, to whose excellent services in the matter of topographical survey work I have already had occasion to refer. Clerical work was effected by the office establishment attached to my post of Inspector-General of Education.

For the preparation of finished drawings of the large series of site plans, &c., illustrating the detailed Report on my explorations in Chinese Turkestan, Colonel J. E. DICKIE, R. E., Commanding Royal Engineer, and Secretary to the Chief Commissioner, North-West Frontier Province, Public Works Department, was kind enough to place at my disposal the services of an efficient draftsman of his office, M. Muhammad Ismail. For this and other valuable assistance received from Colonel J. E. Dickie I wish to record here my grateful acknowledgments.

7. A list of the photographs taken by myself for archæological purposes will be found in Appendix I.

8. At the close of the official year I had the satisfaction of taking over into safe custody, for future deposit in the Museum planned in connection with the Victoria Memorial Hall, Peshawar, a large collection of relievos and sculptured fragments of Græco-Buddhist or Gandhara art which had accumulated at the residence of the Assistant Commissioner, Mardan. The total number of pieces, varying from Buddha statues almost life-size to relievo fragments in stucco or stone measuring only a few inches, amounts to 227. The great majority had been received by Mr. P. J. G. PIPON, C. S., while Assistant Commissioner, Mardan (1902—1904), from village headmen and other natives of his sub-division, who alleged to have found them in the course of accidental excavations. Other pieces had apparently been left behind at the Assistant Commissioner's bungalow as remnants of earlier collections.

Considering how much of the remains of Gandhara art has been lost to research through the "irresponsible diggings" of an earlier period and through careless amateur collecting, special thanks are due to Mr. Pipon for having carefully kept the sculptures brought to him in this manner, for having in most cases kept a record of the alleged find-places, and for having finally on his transfer from Mardan arranged in consultation with myself to hand over the whole collection for deposit in the future Museum. Many of the pieces are fragments such as might have been thrown aside as useless by the natives who in former days were engaged in digging out "idols" for supply to European collectors; in no instance is accurate information available as to the exact conditions and spot in which particular pieces were discovered, and even the general statements received as to the find-places may not always be reliable. Still there are numerous pieces which are well-preserved and of manifest interest for Græco-Buddhist iconography, and when once a detailed examination of the collection can be made, the recorded names of find-places will

prove useful for grouping pieces of probably identical origin. The whole collection, filling four large carts, was carefully packed at Mardan under my supervision and transported to my office, where every piece of sculpture has since been marked with the name of the collector and the alleged find-place wherever recorded.

Three smaller collections of sculptures similarly acquired, comprising 6, 15, and 5 pieces, respectively, were subsequently received from the Hon'ble Colonel H. A. DEANE, C.S.I., Chief Commissioner; Major C. RAWLINSON, C.I.E., Deputy Commissioner, Peshawar; and Mr. J. WILSON-JOHNSTON, C. S., Assistant Commissioner, Mardan.

9. Three collections of coins were referred to me by the Revenue Commissioner, North-West Frontier Province, for report under the Treasure Trove Regulations. Two of these, coming from the Hazara District, comprised numerous gold and silver pieces of the Later Kushan and Hindu Shahi dynasties, respectively (see for details Section iv. of Part II.), while the third, found when digging a grave close to Utmanzai village, Hashtnagar, was composed of Arab gold coins of the twelfth century, A. D. In arranging for the distribution of the coins between various museums care was taken to reserve representative specimens for the collection to be formed at Peshawar.

APPENDIX I.

LIST OF PHOTOGRAPHS.

SERIAL No.	LOCALITY.	SUBJECT OF PHOTOGRAPH.	SIZE OF NEGATIVE.
1	Adh-i-Samudh ...	East wall of Fort ...	6½ × 4½ inches.
2	Ditto ...	North wall of Fort, looking south-east ...	Ditto.
3	Ditto ...	North corner bastion of Fort seen from south-east.	Ditto.
4	Ditto ...	North corner bastion of Fort seen from north-west.	Ditto.
5	Akra ...	Eastern part of Mound ...	Ditto.
6	Do. ...	Southern part of Mound ...	Ditto.
7	Do. ...	Ancient well on Mound ...	Ditto.
8	Do. ...	Minor mounds to south-east ...	Ditto.
9	Kafirkot ...	General view from range to east ...	Ditto.
10	Ditto ...	Interior of fortress seen from south angle ...	Ditto.
11	Ditto ...	South-east portion of interior of fortress ...	Ditto.
12	Ditto ...	Interior of fortress seen from north ...	Ditto.
13	Ditto ...	North-west face of circumvallation towards Indus.	Ditto.
14	Ditto ...	Bastions and curtains, north-west face, near west corner.	Ditto.
15	Ditto ...	Bastions and curtains, north-west face, with gate.	Ditto.
16	Ditto ...	Wall of north-west face with Shrine D ...	Ditto.
17	Ditto ...	Main bastions of north-west face ...	Ditto.
18	Ditto ...	Citadel in west angle seen from south-west face	Ditto.
19	Ditto ...	Corner bastion, west angle ...	Ditto.
20	Ditto ...	Bastions and curtains of south-west face seen from west.	Ditto.
21	Ditto ...	Kanjari-Kothi temple, south face ...	Ditto.
22	Ditto ...	Ditto, west face ...	Ditto.
23	Ditto ...	Temple *B*, seen from south ...	Ditto.
24	Ditto ...	Temple *A*, seen from south-west ...	Ditto.
25	Ditto ...	Ditto, seen from south-east ...	Ditto.
26	Ditto ...	Temple *D*, seen from south-east ...	Ditto.
27	Ditto ...	Temple *C*, seen from north-west ...	Ditto.
28	Ditto ...	Ditto, seen from north-east ...	Ditto.

Appendix I—*concluded.*

Serial No.	Locality.	Subject of Photograph.	Size of Negative.
29	Kafirkot ...	Mari ruin, seen from north ...	6½ × 4½ inches.
30	Ditto ...	Ditto, seen from south-east ...	Ditto.
31	Sale-Dheri ...	Interior of ruined monastery, north-west corner	Ditto.
32	Mahaban ...	Shahkot summit, seen from Miyagai-Kandao...	Ditto.
33	Ditto ...	Ditto, continued to north-west ...	Ditto.
34	Ditto ...	Northern spur, seen from Ballighat ...	Ditto.
35	Ditto ...	Silosar summit, seen from Shahkot ...	4¼ × 3¼ inches.
36	Ditto ...	Ditto, continued to south-west ...	Ditto.
37	Dewai ...	View of Fort from north-west ...	6½ × 4½ inches.
38	Do. ...	Above view continued towards Indus ...	Ditto.
39	Mount Banj ...	Site of northern group of ruins ...	Ditto.
40	Ditto ...	Central part of site ...	Ditto.
41	Ditto ...	Site of southern group of ruins ...	Ditto.
42	Ditto ...	View from Banj Peak towards Indus ...	Ditto.
43	Ditto ...	View from Banj Peak, continued towards north-east.	Ditto.
44	Ditto ...	View from Banj Peak, continued to north of ruined site.	Ditto.
45	Ditto ...	View from Banj Peak towards Shahkot ...	Ditto.
46	Ditto ...	Ditto, continued towards Guru	Ditto.
47	Asgram ...	Ruined Stupas, Asgram ...	Ditto.
48	Ditto ...	Ditto ...	Ditto.
49	Balar	Stupa, seen from south ...	Ditto.
50	Do.	Ditto north ...	Ditto.
51	Pishin ...	Riassa-Ghundai Mound, seen from north-east	4¼ × 3¼ inches.
52	Loralai ...	Ruined Fort *A*, Monastery Hill, from east ...	Ditto.
53	Ditto ...	South-east bastion of above ...	Ditto.
54	Ditto ...	Wall of south-east bastion, from inside ...	Ditto.
55	Ditto ...	North-west face of ruined Fort *B*, Monastery Hill.	Ditto.
56	Ditto ...	South-west corner bastion of above, seen from north-west.	Ditto.
57	Thal ...	Shorgalai Mound, seen from west ...	Ditto.
58	Do. ...	Eroded south-east face of above ...	Ditto.
59	Chhalgarhi ...	Main mound, seen from south-west ...	Ditto.
60	Ditto ...	Ancient pottery from Chhalgarhi Mounds ...	Ditto.

PART II.

PART II.

SECTION i.—ANCIENT REMAINS IN THE KOHAT DISTRICT.

Antiquarian remains in Kohat District.

THE district of Kohat, through which I passed for the first time in January, 1904, offers among its rugged and arid hills far too little of cultivable ground to have ever supported a large population or to have been the seat of a rich and flourishing community such as historical records and ancient remains alike attest for the great fertile valleys of Peshawar and Swat to the north of it. No distinct reference to Kohat can be traced in pre-Muhammadan records. I was hence not altogether surprised that my enquiries during the tours I made in the District brought only two localities of archæological interest to my notice. Both are to be found in the vicinity of the town of Kohat, which appears to have been from early times the administrative centre of the territory.

This is amply accounted for by the natural advantages of its position in an open and easily irrigated part of the main Kohat Valley and at the very foot of the pass which forms the nearest and most convenient approach to Peshawar. It may be considered as certain that just as the tribes of the Kohat hills were during later Muhammadan and Sikh times more or less effectively subject to the Governors established at Peshawar, so also in earlier periods the power holding ancient Gandhara exercised control over the hill tract on its southern border.

Ancient road on Kohat Pass.

The first place of antiquarian interest is characteristically enough the Kohat Pass itself, where the remains of an ancient road can be traced for a considerable distance, probably not less than 1½ miles, along the bare spur which flanks the left or eastern side of the narrow valley descending from the pass southwards. The remarkable regularity of the alignment, which follows the inner slope of the spur and winds along its projections and receding side nullahs at a gradient that seems almost uniform throughout, makes this road very conspicuous to any one standing on the top of the pass or travelling along the newly constructed tonga road which skirts the spur opposite. The bridle path, which was in sole use until the new road was constructed, descends in steep zigzags to the bottom of the gorge and keeps entirely clear of the ancient road. That the latter is pre-Muhammadan, and probably of a very early date, may be considered as certain in view of the close agreement which its system of alignment and construction shows with that observed on the so-called "Buddhist roads" on the Malakand and Shahkot Passes leading into Udyana.* I was able to examine only a small portion of the road nearest to the pass; but this sufficed to show that, like the roads just referred to, it is partly cut into the rock and partly carried over supporting walls of rough, but solid, masonry. Owing to the amount of detritus washed down from above and the damage which the walled-up portions have suffered, it is manifestly impossible to determine accurately the original width of this road. But while its gradient and curves would scarcely have admitted of cart traffic, it is safe to assert that for laden animals from the elephant downwards it must have offered a far more convenient route than any bridle path which these hills knew before they were opened to modern engineering. Though the road and its antiquity are well known to the people I did not hear any local traditions about it. Nor did I succeed in tracing its continuation on the northern face of the pass, where, however, the need for elaborate road construction is less marked in proportion as the pass itself approximates more closely to the level of the adjoining valley.

Bhona Springs.

Though Kohat town probably occupies a very old site, as shown by the deep layers of débris and the old graves which occasional diggings for foundations, &c., have disclosed, my local informants—among them the late Shahzada Sultan Jan, K.C.I.E., whose knowledge of, and interest in, all local lore of Kohat and the Kurram was great—were unable to indicate any structures

* Compare regarding these ancient roads Colonel A. H. Deane's *Note on Udyana and Gandhara, J. R. A. S.*, 1896, pp. 671 *sq.*

older than the Durani rule. Yet a trace of antiquity survives at least in the name *Bhona* given to the fine springs which issue at the east foot of the Kohat Fort and assure to the town and environs its abundant water supply. There can be no doubt that the name is the direct phonetic derivative of the Sanskrit term *bhavana*, 'residence,' 'sacred abode,' which is common in the names of ancient Buddhist shrines in Kashmir, and which is applied to this day to that famous pilgrimage place, the springs of Martand.* The Bhona springs are no longer a recognized place of pilgrimage, but a local Hindu fair is held here in the month of Vaisakha.

Ruins of Adh-i-Samudh.

The ancient mountain fastness known as *Adh-i-Samudh* is the second locality of archæological interest in the vicinity of Kohat, and its ruins proved far more extensive than could be expected from the accounts previously received. They occupy the last offshoot of a precipitous spur which descends from the Istargho Range forming the watershed towards Tirah, and abuts into the open plain of the Kohat Valley about 5 miles to the west-north-west of Kohat town. On ascending the foot of this spur from the hamlet of Ghulam Saiyid, I reached the first remains of stone walls (here much decayed and of rough construction) at a height of about 300 feet above the plain. These seem to have belonged to a kind of outwork of the proper stronghold. The latter is approached by a narrow path which first ascends a steep rocky ridge towards the north-west, and then, at an elevation of circ. 500 feet, winds eastwards round the top of an amphitheatre of unscaleable rock walls. These form the natural defences to the south-east and south for a mountain fastness, the ruins of which rise over steep slopes and intervening small terraces to a height of circ. 700 feet above the plain. On the narrow ledge above the middle of that part of the rock scarp which faces to the south for a total distance of some 500 yards, there issues a fairly copious perennial spring which gives life to a large Banyan tree and some smaller trees and shrubs doubly conspicuous on this barren mountain side. The constant supply of water assured by this spring was, no doubt, a main consideration for those who first created the stronghold. But the position besides offered other natural advantages scarcely less conspicuous.

Circumvallation.

The fortified portion of the spur has not only the natural rampart on the south already referred to, but is protected on the other sides by deep and precipitous ravines which separate it effectively both from neighbouring side spurs and the slope of the main ridge rising above. The line of bastioned stone walls which closely follow the scarp of these ravines, commences some 200 yards to the east of the spring, where the rock wall ceases to be unscaleable. The line first faces eastwards and ascends very steeply along the cliffs which flank a deep-cut torrent bed, running from north to south, to a point circ. 200 feet above its starting place. There the nullah turns sharply to the west-north-west, and is followed along its edge (here less precipitous) by another line of bastions and connecting curtains which forms the northern face of the defences. The ground immediately to the south of this face consists of a small level plateau or shoulder, circ. 200 yards long with a width varying from circ. 25 to 35 yards. A strongly projecting bastion resembling a ravelin marks the head of the ravine so far followed and also the north-western angle of the whole circumvallation. The main ridge rising on the north shows a small saddle just above this point, and from it descends another ravine which, gradually deepening, flanks the fortified spur on the west. Along this western side, too, a line of walls can be traced; but their remains are far more decayed than on the north and east.

Construction of walls.

The walls of the latter faces show several features deserving of special notice. The east wall, though badly injured in places where the foundations have given way owing to the precipitous nature of the slope, still rises at other points to 20—25 feet in height. It shows throughout a construction exactly similar to that which characterises all pre-Muhammadan structures in Yusufzai,

*Compare my translation of the *Rajatarangigi*, Vol. I., notes i. 93, iv., 192; II., 339, 369. It may be noted here in passing that among the now wholly Pashtu speaking population of the Kohat Hills another remnant of local terminology survives in the word *Toi* or *Towi* which is applied as a generic appliation to the Kohat River as well as to its main feeders; it is undoubtedly, like the name *Tohi* borne by several mountain-streams which drain the Pir Pantsal Range, south of Kashmir, derived from the Sanskrit term *taushi;* see my *Rajatar.*, vii. 53 note.

Swat and Buner. The masonry, entirely without mortar, consists of roughly hewn slabs, of no great size but fairly uniform in height, which are set in regular courses; space is left between the slabs laterally for the insertion of closely packed columns of small flat stones which fill the interstices. Narrow bands of similar flat stones separate one course vertically from the next and adjust any small inequalities of height between the slabs composing each course. The average thickness of the wall seemed 8 to 10 feet. Three bastions of semi-circular shape which project from this face have suffered much decay.

North-west bastion.

The wall, which defends the small plateau on the north, was—owing to the reduced depth of the ravine and the commanding height of the hill slope opposite—evidently the most exposed portion of the circumvallation. We find it accordingly strengthened by not less than five bastions. Four of these are small, semi-circular in shape, and have now lost most of their outer masonry facing. The fifth built at the extreme north-west angle, on a narrow rock ledge jutting out northward, forms a small semi-detached work completely commanding the ground which separates the two ravines already referred to. It measures over 40 feet from north to south, with a breadth of circ. 24 feet, and being one solid mass of masonry has remained in relatively good preservation. On its eastern face (see fig. I) it still rises to a height of 42 feet.

The construction of this bastion differs materially from that of the rest of the walls by showing on the west and north sides closely fitting courses of large dressed blocks, up to 3 feet in length and over 1 foot in height, without any "packing" of small stones in interstices as described above. In the masonry facing the east side of this bastion similar large blocks are seen, but in far less regular courses, and interspersed with rows of smaller stones serving as wedges. But the regular columns of small flat stones filling interstices, so characteristic for what for convenience's sake we may call the "Gandhara" type of masonry, are absent here also. Judging from my examination on the spot I am inclined to attribute the irregular appearance of the masonry work on the east side to later repairs; but my observations did not furnish any definite evidence for deciding the interesting main question as to whether this bastion, with its general construction so strikingly different from that of the rest of the walls, belongs to a later or an earlier epoch.

Character of fortified site.

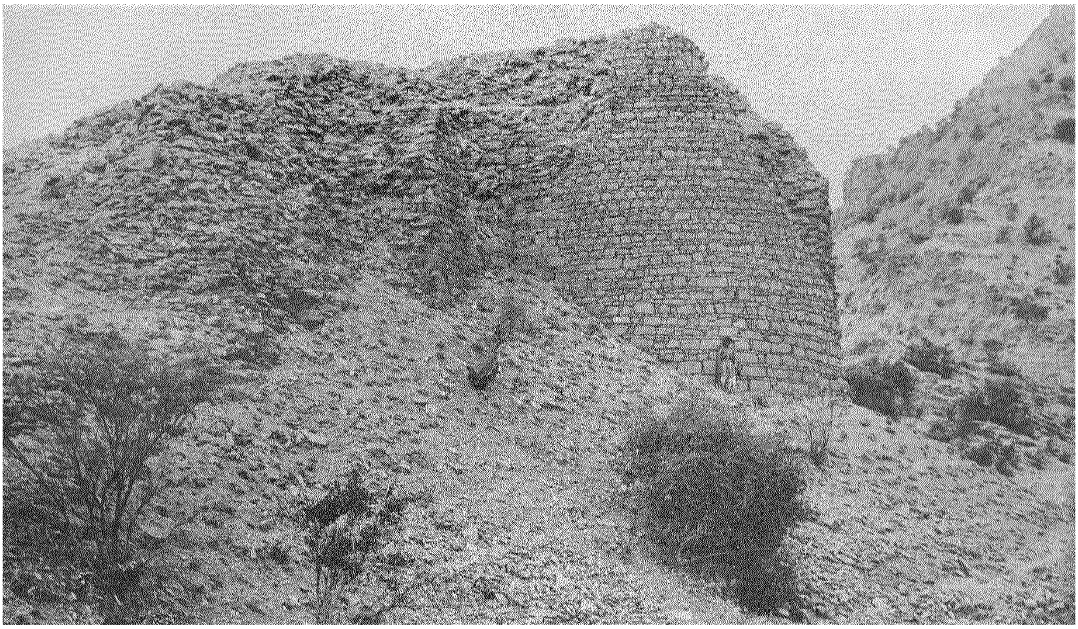
Though the extent of the total fortified area is perhaps not less than one-third of a square mile, most of it is ground so precipitous that it could never have served for the location of houses. I was unable to trace any distinct remains of buildings even on such small terraces of level ground as are found, *e. g.*, along the north face of the walls, and again near the spring; but it is possible that the layers of loose stones which cover these terraces may represent the débris of dwellings roughly built in stone and plaster. The scantiness of potsherds seemed another indication that this hill fastness could not have held a settled population for prolonged periods.

Descending by a very rugged path into the ravine eastwards, I was shown a small cave with stalactites a short distance below the south-east angle of the fortified area. In front of it is a platform of ancient masonry with a walled-up path leading up to it. It was only when descending further that I noticed a massive wall of solid masonry, apparently in very fair preservation, built across the upper portion of the ravine which is formed between the semi-circle of rock walls to the south and south-west of the spring. This wall has a bastion at its north-east end, and appeared to rise still to a height of 30—35 feet; only towards the south-west end is it broken for some distance. It is possible that this isolated wall was meant not only for defensive purposes, but also to transform the head of the ravine into a reservoir which could easily be filled with water either from the spring or from rainfall. Looking from above nothing in the rock amphitheatre thus enclosed had attracted my attention; and when I was descending after long hours spent in surveying the ruins above, it was getting too late for any close examination of these particular remains.

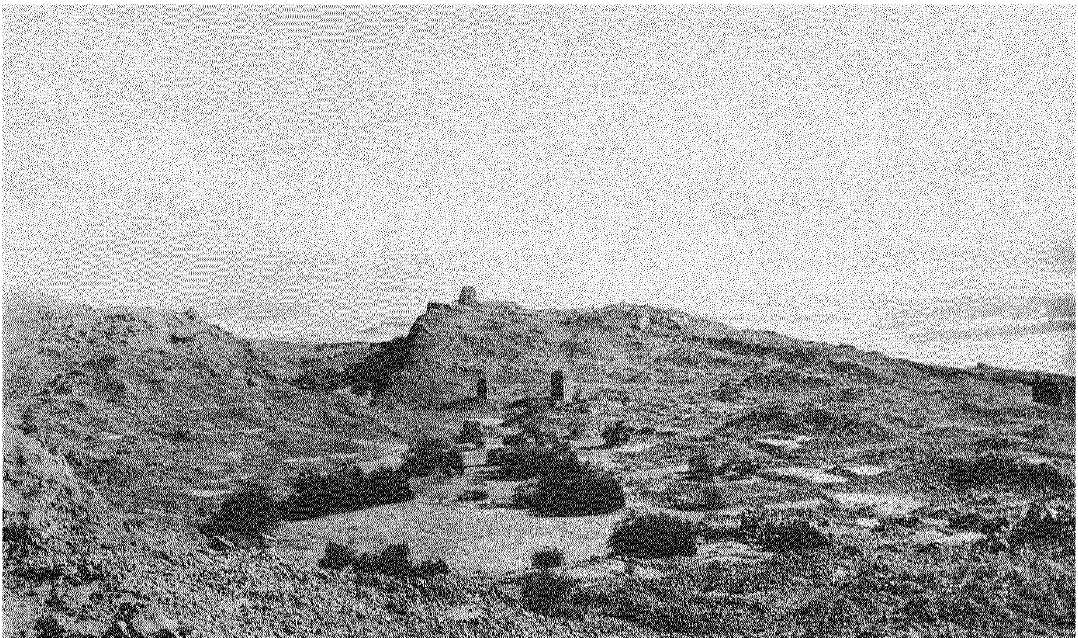
Age of Adh-i-Samudh ruins.

Old coins are said to be found occasionally among the ruins after rains; but unfortunately my enquiries at the hamlet of Ghulam Saiyid and at the nearest village, Muhammadzai, did not lead to any specimens being produced.

I. NORTH BASTION, ĀDHI-SAMŪDH



II. INTERIOR OF KĀFĪR-KŌṬ.
SEEN FROM SOUTH



Their evidence would be all the more valuable in the absence of any sculptured remains which might be utilized for an approximate dating of the ruins. In view of what has been stated above as to the peculiar construction observable in the greatest portion of the walls, it may be considered as certain that the fortification of the site goes back to pre-Muhammadan times; but no closer determination of the period seems possible at present. Judging from the position and character of the ruins, it seems probable that 'Adh-i-Samudh' served as a mountain fastness of the rulers of Kohat capable of offering temporary refuge in times of need. Whether the name by which it is now known, is old I am unable to ascertain. It is supposed to be of Arabic origin, and is accordingly subjected to various forms of "popular etymology" among representatives of Muhammadan learning at Kohat.

SECTION ii.—ANCIENT GEOGRAPHY AND REMAINS OF THE KURRAM VALLEY AND BANNU DISTRICT.

Ancient geography of Kurram region.

The westernmost part of the Kohat District (Upper Miranzai) belongs to a distinct and geographically well defined territory comprising the drainage area of the Kurram River. The historical importance of this border region of ancient India, now divided between the districts of Bannu and Kohat, the Frontier Agencies of the Kurram and Tochi, and the Afghan tract of Khost, is reflected in the relatively early notices we can trace of it. We may mention these briefly, as they invest with additional interest what ancient remains have as yet come to light here. The Kurram River enjoys the distinction of being named already as *Krumu* in a famous hymn of the Rigveda (X. 75), our earliest Indian text. The imposing snowy range, which towers above its upper course, and remains visible down to almost its junction with the Indus, is in all probability, as I believe to have shown long ago, mentioned in an Iranian text almost as venerable; for the *spiti-gaona gairi*, 'the white-coloured mountains' which the Avesta names in the well-known hymn to Haoma (Yasna ix.) in close conjunction with what I take to be the ancient name of Tirah (*staêra*), are manifestly the *Safed-Koh.*

Fa-hien's notice of Kurram.

The earliest notice of the territories along the Kurram, and fortunately a very clear one, is furnished by the Chinese pilgrim Fa-hien. Starting early in 404 A.D. from the tract which corresponds to the present Nangrahar near Jalalabad in the Kabul Valley, he with two fellow pilgrims proceeded southward, crossed the range of the "Little Snowy Mountains," *i.e.* the Safed-Koh, and arrived in the kingdom of *Lo-i*, where they found Buddhist establishments "with nearly three thousand monks, students of both the Mahayana and Hinayana." Having passed here the summer retreat, "descending south and journeying for ten days, they reached the *Po-na* country, where there are also some 3,000 priests or more, all belonging to the 'Little Vehicle.' From this journeying eastwards for three days they again crossed the *Sin-tu* (Indus) River" at a point where both sides of it were level.* As correctly recognized by General Cunningham, the kingdom of *Lo-i* represents here the Upper Kurram Valley, while in *Po-na* we have clearly a Chinese transcription of an earlier form of the name of Bannu. We have every reason to assume that then as now the fertile open tract at the head of the Upper Kurram Valley was the most important and populous portion of the first named territory. Starting from there, and taking into account the difficulties of the route in the narrow gorge of the Kurram between Thal and Bannu, ten marches appear a very reasonable estimate for the journey to the site of Akra, which our subsequent remarks will show to have been the probable location of the political centre of Bannu in Fa-hien's days. In the same way the distance and direction indicated for Fa-hien's further journey to the Indus agrees very correctly with the three marches which are reckoned at the present day from the vicinity of Akra to Kundal, the nearest point on the Indus at the southern end of the level plain of the Isa Khel Tahsil.

* See *Fa-hien's Travels*, transl. Legge, pp. 40 sq.; *Si-yu-ki*, transl. Beal (Fo-kwo-ki), p. xxxvi.

Hiuen Tsang's notice of Bannu.

The account which the later and more celebrated Chinese pilgrim, Hiuen Tsang, has left us of this region is scarcely less definite in topographical respects, and supplies interesting details as regards the nature of the country and the character of its inhabitants. General Cunningham's identification of Hiuen Tsang's *Fa-la-na,* with the territory of which Bannu was the natural and political centre, must appear convincing to any student who is familiar with the actual geography of this part of the North-West Frontier.* The 'Life' of the pilgrim tells us that he visited Fa-la-na after having arrived at *Lan-po,* the present Laghman, on his return journey from India towards Kabul and China (circ. A. D. 644). As Fa-la-na, like most of the territories from Peshawar to the Hindukush, was then subject to the king of Kapisa, under whose special protection Hiuen Tsang was actually travelling, the détour in the pilgrim's route as implied by his visit to Fa-la-na becomes quite intelligible.†

We are told that he reached this territory (*i. e.*, its chief place) by travelling fifteen days due south from Laghman. A look at the map shows that the bearing and distance indicated would take the pilgrim exactly to the centre of the Bannu oasis. The shortest and most convenient route from Laghman to Bannu leads due south over the Safed-Koh to the Upper Kurram Valley, and thence continues with practically the same southern bearing down the Kurram River. We have seen already that the distance from the southern foot of the Safed-Koh in Upper Kurram to Bannu was reckoned by Fa-hien at ten marches; and as the direct road distance between the centre of Upper Kurram, as approximately marked by Parachinar, and the centre of the Laghman tract (allowing for the mountainous character of much of the ground) may safely be estimated at 70—80 miles, we arrive exactly at the five additional marches which Hiuen Tsang's itinerary indicates.

We are able to establish the identification of Fa-la-na with the Bannu District also by another topographical test. Hiuen Tsang's 'Memoir of the Western Countries' tells us that on leaving this territory and going towards the north-west, for about 2,000 li or twenty marches, after traversing great mountains and crossing wide valleys, he reached the territory of *Tsu-ku-ch'a,* which was beyond the frontier of India.‡ The capital of this territory, which the pilgrim calls *Ho-si-na,* has been identified with certainty as the present Ghazni, and applying from this fixed point both the bearing and distance just indicated we are once more taken back to Bannu as the territory meant by Fa-la-na.

Description of Fa-la-na (Bannu).

Fa-la-na according to Hiuen Tsang's transcriptional system is intended to represent a Sanskrit *Varna* or *Barna,* and such a form may on philological grounds be safely accepted either as the genuine original form or as the most likely Sanskritization of the local name which in the Prakrit of the seventh century, and probably long before, is likely to have already sounded *Banna* or *Bannu.*§ The pilgrim describes the territory as being about 4,000 li or 40 daily marches in circuit and the population as dense; but as he distinctly states the greatest portion of the area to be occupied by mountains and forests, it is quite clear that his remark as to the thickness of the population can only refer to the fertile part of the territory. The justness of his observation must be evident to any one who is acquainted with striking contrast which the exceptionally fertile and thickly populated central part of the Bannu District offers not only to the barren hills around it, but to all other tracts to be found on the left bank of the Indus between the Peshawar District and Lower Sind.

* See *Ancient Geography of India,* pp. 84 *sqq.*, General Cunningham has, as in other instances, mixed up the well recognized main facts with conjectures which are not critically tenable. Hence his identification has not been treated by later writers with the attention it deserves.

† Laghman (*Lan--po,* Skr. *Lampaka*) was the last territory in the Kabul Valley which was reconed as belonging to India (see *Si-yu-ki,* tranal. Beal, i, p. 68). It was natural for the pilgrim to turn off of it to Fa-la-na, another neighboring region which is described as being on the extreme border of India, and which when travelling towards India by the same Kabul Valley route, some fourteen years earlier, he had left unvisited.

‡ See *Si-yu-ki,* tranal. Beal, ii, p. 282 .

§ We should have an early witness fo rthis form of the name in Ptolomy if by *Banagara* mentioned by him (VII, i, 47) among the towns of Indo-Scythia to the west of the Indus, it is meant *Bana-nagara, i.e.* Bannu Town, as assumed by General Cunningham. Unfortunately neither the text nor the map of the Greek geographer furnish direct confirmatory evidence.

That part of the Bannu District with its ample irrigation and remarkable fertility presents, in fact, the character of a true oasis. The close resemblance between it and the typical oases of Central Asia as known to me from Eastern and Western Turkestan in physical features, conditions of cultivation, distribution and character of population, &c., has struck me greatly, and would in my opinion well deserve special treatment from the point of view of the geographical student.

People of Fa-la-na.

From Hiuen Tsang's estimate of the circuit it must be concluded that the territory administered in his days from Bannu comprised the whole of the area drained by the Kurram River, and in addition probably also a portion of the Derajat, perhaps the whole of the present Dera Ismail Khan District. But we have reason to assume that, as in other instances, his description of the territory and its people is mainly taken from the region around the administrative centre, *i. e.*, the Bannu oasis. He mentions the regularity of cultivation and the relative coolness of the climate. The people were rough in manners, of a violent disposition, and low in their sentiments,—a description that goes far to prove that some of the most conspicuous defects with which the character of the modern Bannochi is generally credited, may be of far older origin than the Pathan invasion. The language spoken by the people was "somewhat like that of Mid-India"; about literature or arts they did not care. A portion of them followed Buddhism, but the convents, which numbered some dozens, were mostly in ruins, and the monks numbered only about three hundred. The capital, the position of which is not specified, measured about 20 li or circ. 4 miles in circumference; not far to the south of it was an ancient convent marking the spot where Buddha was believed to have preached, and by the side of it traces were shown which the four past Buddhas had left of their steps while walking for exercise.

Mountains and people of Kikan.

An interesting notice with which Hiuen Tsang closes his account of Fa-la-na proves that the mountain regions to the west were in his days as until quite recent times wholly independent of the rule established in Bannu and the rest of the Derajat. According to the report heard by him from the people, there was on their western frontier the territory of *Ki-kiang-na*, the inhabitants of which lived amid great mountains and valleys in separate clans without any chief ruler. They were said to breed an immense quantity of sheep and horses, and their horses being of large size and an excellent breed, rare in the countries around, were highly valued. That this territory of Ki-kiang-na is the same as the *Kikan* region, which early Arab historians vaguely mention to the north of Sind, has been recognized long ago by European scholars;* but it does not appear to have been realized how accurately the Chinese pilgrim's account represents the conditions prevailing down to our own days in Waziristan and the whole mountain region along the Sulaiman Range. We see also clearly that the breeds of horses now known as Wazir and Baluch were indigenous in these mountains probably long before the advent of the tribes from which they now take their names.

It is curious that we should find a reference to the famous horses of Kikan also in what appears to be the earliest Muhammadan notice of Bannu. Baladhuri tells us of an early raid which the Arabs under Al-Muhallab's leadership made northward from Sind in 664-65 A. D., and on which they reached "*Banna* and *Al-Ahwar* which lay between Multan and Kabul." On the same occasion the Arabs are related to have defeated in Kikan a large force of Turkish horsemen, the fastness of whose steeds is specially praised.† That by the 'Banna' of the Arab historian the Bannu District is meant does not appear to me doubtful, even though the identity of the other territory, *Al-Ahwar*, named along with it, cannot be established; for we know that the raids of the Arab invaders of Sind during the latter part of the seventh century extended along the Indus Valley even as far as Gandhara.

Ancient remians in Upper Kurram.

Turning now to the known antiquarian remains of the region of which we have just briefly surveyed the earliest historical notices, it must be acknowledged that they are scanty, indeed, and practically restricted to two important

*See *e.g.* Reinaud, *Memoire sur l'Inde,* p. 176; Sir H. Elliot, *Histories of India,* i. p. 331m &c.

† See Marquart, *Eran-shar,* 1902,p. 273.

sites. In the Upper Kurram Valley the local officers consulted by me were not aware of the existence of any ancient structures above ground, and the very brief visit which I was able to pay to the head-quarters of the Agency at Parachinar, did not allow me to supplement these enquiries by a personal search in the less frequented side valleys. Subsequently, however, I heard of certain caves in the Kirman Darrah, which the people consider to have served as habitations in ancient times, and in which Mr. W. Merk, C.S.I., when Political Agent of the Kurram, is said to have carried out some excavations. Of the result of these no definite information seems to have been recorded. Traces of ancient canals are known to the people at various points to the west of Parachinar (*e. g.*, near Kharlachi close to the Afghan border), and may be taken as an indication that this naturally fertile portion of the valley held once a far larger population than at present. Fa-hien's estimate of three thousand monks for the territory of Lo-i, *i. e.* the Upper Kurram, distinctly presupposes this. I was interested to obtain local confirmation of the fact already heard in Kohat that the great peak of Sikaram, 15,620 feet above the sea, which is the culminating point of the whole Safed-Koh Range, and is visible over a vast extent of country, forms the object of a regular annual pilgrimage for Hindus from the Indus to Kabul. A large spring, apparently not far from the summit and to the west of it, is the specific Tirtha visited, and an ancient pathway, of which traces are said to exist on the spurs descending from the peak towards the south-east, is believed to have been constructed for the purposes of the pilgrimage.

Importance of Kurram route.

Whatever remains of antiquity the Upper Kurram Valley may still retain below the ground or in the little-known glens of the Safed-Koh, it appears to me highly probable that the route which leads through it must, owing to the great natural facilities it offers for communication between Kabul and the central part of the Indus Valley, have been one of considerable commercial and political importance in ancient times. We have a direct proof of this in the fact already referred to that Bannu and a great portion of the Derajat was in Hiuen Tsang's time ruled by the kings of Kapisa, whose original seat of power was far away in the Koh-i-Daman at the foot of the Hindukush and who may safely be identified with the 'Turkish Shahiyas of Kabul' of early Muhammadan historians. The extension of the Frontier railways may partly restore the importance of the route in future, though with a divergence from its natural direction; for it is evident that the true continuation of the route leading from Kabul over the Shutargardan and Peiwar Passes does not lie through the barren hill tracts of Kohat, but down the Kurram into the Bannu oasis, and on to the Indus at the point where the great river first becomes fully navigable.

Clay and sun-dried bricks have, no doubt, in ancient days, as at present, formed the only readily available building material within the Bannu oasis. Structures of this kind when once abandoned were bound to decay rapidly under atmospheric influences, while such traces as they might have left below the ground could not fail to suffer equally by the moisture spread over the whole cultivated area through constant and abundant irrigation. At the same time the heavy silt deposit accompanying this irrigation has probably during the course of centuries considerably raised the general ground level in the oasis, which, as my archæological observations at Khotan and other oases of Chinese Turkestan have clearly proved under exactly similar conditions, would necessarily lead to the effective burial of any old sites once brought under cultivation.* In view of these considerations it need not surprise us that there is at present only one locality known within the Bannu oasis where ancient remains are found. This is the site of Akra, some seven miles to the south-south-west of the town and cantonment of Bannu.

Mounds of Akra.

The mounds of *Akra* form a conspicuous object in the level flat of the alluvial plain of Bannu, and on that account as well as of the antiquities unearthed from them they have from an early date attracted the attention of European officers stationed in the district. But I am not aware of the site ever having been examined by a competent archæologist. The main group of mounds is situated about a mile to the south of the large village of Bharat,

* Compare Stein, *Sand-buried Ruins of Khotan* (2nd ed.). pp. 243 *sqq.*

which itself is reached from Bannu by a much frequented road leading through richly cultivated country along an old irrigation canal known as Uch-Baran. The largest of the mounds, and the one which in particular bears the name of Akra, rises immediately to the south of the small hamlet of Khabdali and of the adjoining Ziarat of *Tsalwekht Gaz Sahib*, " the forty yards Saint," supposed to be buried there. This mound, though greatly reduced by the excavations which have been carried on here for many years past by villagers in search of soil useful for manuring, still shows imposing dimensions. Its greatest length is in the direction from north-west to south-east, where it measures circ. 320 yards along the crest. Its greatest width is near the centre, measuring circ. 140 yards across on the top. The north-west end of the mound, which appears to have suffered least by recent excavations, still rises to a height of about 70 feet above the level of the surrounding plain ; but the height of the remaining portion, the scene of the actual diggings, nowhere reaches more than 40 or 50 feet.

Ancient strata of Akra.

The examination of the banks of soil laid bare by these diggings proved of considerable antiquarian interest. There can be no doubt that the soil excavated by the villagers for its manuring properties belongs to an ancient 'culture-stratum,' generally 2—3 feet in thickness, containing ashes, plenty of bones and other decomposed rubbish. This is designated by the villagers as *khaura*, and is easily distinguished by its darker colour. Above this 'culture-stratum' are deposited large layers of a fine clayey earth, lighter in colour, varying from circ. 8 to 20 feet in thickness. Within these layers, which are of little or no value for manuring, and are accordingly known to the villagers as '*khandani*,' are found plentiful fragments of ancient pottery and hard bricks as well as rubble usually forming irregular courses. The top and sides of the mound, where apparently untouched during recent times, are thickly strewn with similar fragments of hard pottery and bricks, a result manifestly due to the action of rain and winds which have washed down the topmost layers of light earth while leaving the heavier débris to accumulate *in situ*. Among this débris fragments of ornamental pottery are fairly frequent, while terracotta figurines and small pieces of relievo sculpture can also be picked up occasionally, especially after rains, when the boys of the neighbouring villages are in the habit of searching the slopes for coins.

Coins found at Akra.

There can be little doubt that these upper strata of the mound are mainly composed of the débris accumulated during centuries from structures built in clay or sun-dried bricks. In some of the banks laid bare by the excavations about the centre of the mound I could, in fact, trace here and there remains of rough walls built of sun-dried brick and also of rubble set in plaster. Without prolonged and systematic excavations effected under expert supervision it is impossible to ascertain the approximate periods to which these successive layers belong. The coins shown to me on the spot by villagers as obtained from Akra ranged from pieces of King Azes, who may be assumed to have reigned about the middle of the first century B. C., to issues of the dynasty called by numismatists the 'Little Kushans.' The latter, after having been temporarily dispossessed by the White Huns about the end of the fifth century A. D., seem to have recovered their power over Kabul and a great portion of the North-West Frontier, and to have continued their rule as the 'Turki Shahiyas of Kabul' well into the ninth century. The frequency of their coins at Akra fully agrees with what we have learned from Hiuen Tsang as to the royal power established in Bannu in the seventh century, and, of course, proves that Akra was still inhabited at the time of the pilgrim's visit. I may add here that in the collection which Mr. F. M. Hodgkins, of the Military Works Services, long stationed at Bannu has made of coins brought from Akra, I found also numerous pieces of the 'Hindu Shahiyas of Kabul,' whose rule continued that of the 'Turki Shahiyas,' until it finally succumbed to Mahmud of Ghazni.* As no Muhammadan coins appear to be ever obtained from Akra, it seems safe to conclude that the site did not continue long to be occupied after the time of Mahmud's conquest.

* The relative frequency of these Hindu Shahiya silver coins at Akra is curiously attested by the fact that that have been selected as patterns for numerous forged pieces, also largely represented in the above collection. These forgeries, manifestly meant only for the local market, are of very inferior type and in no way comparable to the high class forgeries of Rawalpindi manufacture. For an account of the 'Turkish and Hindu Shahiyas" see my paper, *Indian Antiquary*, 1906, pp. 84 *sqq.*

Terracotta remains of Akra

A similar chronological indication is furnished by the few fragments of small sculptures representing Hindu deities obtained at the site, which, judging from their style, seem to belong to the centuries preceding the final Muslim invasion. It seems more difficult to fix the chronological limits of the ornamented pottery fragments and terracotta figurines; but I was much struck by the distinct resemblance which some of the latter show in subjects and style to the terracotta figurines brought to light at Yotkan, the site of the ancient capital of Khotan. Figures of monkeys seem to have been as favourite subjects for this toy pottery at Akra as in that distant Indian colony beyond the Karakorum, and, though less varied in posture and less careful in execution, show here the same style of treatment. A similar close affinity is noticeable also in some small terracottas representing grotesque human and animal heads, and once probably decorating vases.

Ancient well.

My examination of the main mound showed at two points features deserving special notice. Recent diggings of villagers near the south-east end of the mound have exposed an old well which has been left standing like a small tower while the earth around has been removed. The well had at the time of my visit been laid bare to a depth of circ. 10 feet from the present top level of that part of the mound; it is round, shows a diameter of circ. 6 feet (measured from the outside) and is lined with sun-dried bricks measuring 13 by 8 inches with a thickness of $1\frac{1}{2}$ inches. The interior of the well had not been cleared, and directions were given to the village headmen to prevent any further interference with it. The south-east end of the mound, which still rises to a height of circ. 50 feet, presents a more solid appearance than other portions. A deep cutting at about half this elevation was pointed out to me as having been made a "long time ago" by some Sahib's order. The banks of this cutting displayed what looked to me very much like walls of solid stamped clay, built up in the same manner as the massive clay ramparts which I had occasion to survey at several ancient sites east of Khotan.* But systematic excavation would be needed to test the correctness of this assumption.

Minor mounds of Akra site

The main mound stretches across a bend of the Lora Nullah which passes the north-west foot of the mound and, after curving round on the west, continues its course to the south-east. This nullah which has steep banks and a considerable breadth, is now entirely dry except for some springs rising in it about two hundred yards to the north-west of the mound. Judging from the direction the Lora Nullah looks very much like an old natural channel for the water now carried by the Uch-Baran Canal, the overflow of which it is said to receive at times of flood. On the opposite bank of this nullah, and facing Akra from the north-west, rises another but much smaller, mound known as the 'Dheri of *Spana-top*.' This as well as a third small mound called *Shah Mahmud Dheri*, between the west face of Akra and the bank of the nullah, rise now only 10—15 feet above the plain, but are said to have been far higher within the memory of man, and to have been reduced by digging for manure. The pits and trenches which furrow them fully bear out this statement.

Among the fields immediately to the east of Akra is a fourth small mound, slightly higher and known by the name of *Gul-i-top*, which is still being worked in the same fashion. Half a mile to the north-east an extensive area bearing the general designation of '*Dheri*,' "the mound," is covered with low banks of earth cut up in all directions by old diggings. There can be no doubt, this expanse of banks and pits represents all that remains of a mound or series of mounds which must have greatly surpassed in size the extant mound of Akra. Want of time did not allow me to take exact measurements, but I estimate that the area cannot be less than one-fourth of a square mile. Its edges are now gradually being brought under cultivation, and as this process has evidently been going for a long time, it is probable that a great deal of ground now occupied by the fields of Bharat once also formed part of the site.

*Compare for descriptions of these ancient fortifications of Endere, Aksipil, Karadong, Stein *Sand-buried Ruins of Khotan*, pp. 400, 408, 423.

Akra, the site of ancient capital of Bannu.

It appears to me impossible to doubt that the mounds of Akra mark the site of an ancient town of importance, a great portion of which must have been built on ground that had been steadily rising through the débris accumulation of centuries. Considering the relatively restricted extent of the oasis and the absence of similar sites within its limits, it seems justified to conclude further that the remains of Akra are those of the ancient chief town of the territory. In comparing the dimensions of the extant mounds with the circuit indicated by Hiuen Tsang for the Bannu capital of his days (20 li or circ. 4 miles), it must be remembered that only the oldest and most closely tenanted quarters of the latter could have occupied ground sufficiently elevated for their position to remain marked to the present day by conspicuous mounds. The traces of other parts of the town, where buildings were fewer, and where the accumulation of débris had been less constant, must have become effaced relatively soon after the site had been abandoned. Cultivation would necessarily invade first those portions of the deserted town area which lay lowest, and consequently could be most easily brought under irrigation. To what extent the silt deposit accompanying the latter has helped to bury relics of the old town and to equalize the general ground level of the site, could only become known to us through extensive excavations in the fields surrounding the mounds, after the fashion of those which a fortunate accident started at the site of the ancient Khotan capital.

Remains at Zindai Khwar.

The correctness of my surmise as to a rise in the ground level through silt deposit within the oasis and as to ancient remains having thus become effectively buried, has been confirmed by the examination of a curious site which I visited in February last during my second inspection tour in the Bannu District. Information kindly furnished to me by Mr. E. W. Tomkins, District Superintendent of Police, Bannu, induced me to ride to a locality known as Zindai-Khwar, situated about 3 miles to the south-south-east of Haved, and at a distance of circ. 15 miles from Bannu. Remains of an ancient wall were reported to have recently been dug out there by villagers. On arrival I found that near the deeply-cut winding ravine of the small Zindai stream a "culture-stratum" of 4 to 6 feet in thickness had been laid bare on the south side of a small terrace partly under cultivation. The accidental formation of a small drainage channel had led to its discovery. While digging at this stratum for manuring soil the villagers had come upon a wall constructed of ancient bricks. Judging from the trench left in the place where the wall stood, the latter must have been about 40 yards long. The bricks, being valuable building material on account of their hardness, were removed so effectively that I could only find broken pieces which had been thrown away. The comparison of various specimens showed that the bricks were $2\frac{1}{2}$ inches thick and 8 inches wide, while their length must have been over 9 inches. They had been set in a very hard mortar which still united various fragments. The wall probably belonged to some foundations, and seems to have been reached at the bottom of the culture-stratum. Above the latter rises a layer of what appears to be pure silt deposit from 10 to 12 feet in thickness. On the north side of the terrace débris of coarse red pottery, probably washed out from the same 'culture-stratum,' was strewing the slopes towards the ravine; but these fragments, entirely devoid of ornamentation, cannot furnish any indication as to the age of the settlement which evidently once existed here. What, however, could be ascertained clearly is that a considerable rise of the ground-level must have taken place here over the whole area; for the top of the terrace referred to was practically level with the fields on the opposite side of the ravine.

Section iii.—The remains of Kafirkot.

Fortress of Kafirkot.

We have already had occasion above to refer to the important route which from the Bannu oasis leads down through the sandy tract of Marwat to the banks of the Indus. The narrow defile (appropriately known as 'Darra Tang') in which the Kurram has cut its way through the rugged hills separating the basin of the Bannu District from the alluvial plain of the Indus, forms

the natural gate of the whole Kurram Valley towards the Punjab plains. On the south-east it is flanked by the Khasor Range, and where the latter with its northernmost spur overlooks the junction of the Kurram and Indus, we find it crowned by an ancient fortress known as Kafirkot. Its ruins form the largest and most conspicuous ancient remains still above ground in the Indus Valley below Attock. They had been visited, and some of their more conspicuous remains, briefly described by General Cunningham in Vol. xiv. of his Archæological Survey Reports. But neither the remarkable position of the ancient stronghold nor the character and extent of its fortifications have received there adequate notice, while some of the less accessible, yet distinctly interesting, ruins seem altogether to have remained unexamined.

Natural strength of position.

The ruins of Kafirkot occupy a naturally isolated portion of a long-stretched shoulder or plateau which fringes the northern end of the Khasor Range towards the east and the Indus. The plateau extends along the latter with an average width of one-third of a mile, and forms a kind of step between the river and the crest of the range, which behind rises in this part to over 2,000 feet above the sea. The part of this plateau occupied by Kafirkot is marked out by nature for a fortress. At its north-western and south-eastern sides steep and rock-bound ravines descend from the higher slopes behind, and like huge trenches cut it off from the rest of the plateau. To the south-west the position is separated from the nearest slopes of the main range by a nullah draining south-eastwards. Above this rises to a height of circ. 150 feet a well-defined rocky ridge (see in fig. III) marking the natural line of defence on this side. A rim of rock similar, but not quite so continuous, helps to strengthen the defences to the north-west (see fig. II.) and south-east. Towards the Indus the site falls off in a succession of terraces, the lowest of which presents a very precipitous face, rising abruptly in cliffs most difficult to scale for some 150—200 feet above the river. The westernmost branch of the latter in a deep, though narrow, channel washes the foot of the rocky slopes, leaving practically no room even for a footpath. (The road constructed since the British occupation and still shown on the maps, has long ago been washed away.)

Owing to the extent and roughness of the ground, the few days' stay I was able to make at the site, with my camp pitched on a small piece of level ground by the river below the south-eastern face of the circumvallation, would not have allowed me singlehanded to make an accurate survey by plane table. I accordingly restricted myself to the preparation of a rough sketch plan, supplemented by numerous photographs, of the site for which the commanding positions around offered special facilities. The few among them here reproduced will, I hope, suffice to present a relatively correct idea of the natural features of the site and of the fortifications by which it was defended.

Fortification of Kafirkot

These consisted of a high and massive circumvallation which, following the rocky rim already referred to, formed fairly straight faces to the north-west, south-west and south-east; on the east side towards the river it described a line resembling an arc which, connecting the short south-east face with the river end of the north-west face, first skirted the slope above the southern side nullah and then that above the Indus bed itself. It is seen from this that the area enclosed by the walls shows no regular shape, and this taken together with the strong slopes presented by much of the ground makes an accurate estimate of the surface area at present difficult. But a rough calculation leads me to believe that it can scarcely be less than circ. 52 acres, being thus not much smaller than, *e. g.*, that of the Agra Fort.

The three faces first mentioned still present a continuous line of massive walls varying in height and state of preservation, but formed throughout by a series of semi-circular and oblong bastions with curtains of different lengths between them. On the east side the line of walls can no longer be traced continuously above the vast masses of débris covering the slope. Owing to the great natural strength of the ground the fortifications on this side were probably from the first less solidly constructed, and the difficulty of securing for them a firm foundation on the precipitous slopes, no doubt, accelerated their decay. For the

same reason the walls of the short south-east face have suffered much, particularly at the eastern end, while also the north-west wall shows less conspicuous ruins where it descends to the river.

South-west face of circumvallation.

The imposing line of bastions still rising to a considerable height begins at the point where the south-east and south-west faces meet, and extends in unbroken line for a length of circ. 500 yards along the latter. Fig. III shows it as seen from the height of the western angle of the circumvallation. This angle is occupied by a kind of citadel oblong in shape and resting with its longer side, circ. 140 yards long, along the south-west face. Massive retaining walls separate this citadel from the rest of the interior of the fortress, and as it rises on an elevated portion of the rocky rim enclosing the site, the ground of its several terraces and courts lies from 50 to 80 feet higher than the space forming the centre of the fortified area, as seen in fig. II. The special strengthening of this angle of the circumvallation is fully accounted for by the fact that it is in some respects the most exposed point of the whole. A neck of high rocky ground, which separates at their head the two nullahs running outside the north-western and south-western faces, runs up close to the western angle. Thus the latter lacks the protection of a natural trench and the important advantage of commanding the immediate foreground just at a point where attack is facilitated by the existence of a "dead angle." In evident recognition of this point of weakness we find the actual corner defended by a donjon-like round bastion of exceptional size and solidity, which in its lower portion is constructed of almost cyclopean blocks, and still rises to a height of over 30 feet.

It may be mentioned here that the corresponding angle to the south (between the south-west and south-east faces) was also strengthened by a similarly well constructed and far projecting bastion, here, however, of oblong shape. There, too, the angle held an interior work, capable of independent defence, which is seen in the centre of the photograph, fig. III.

Gate and bastions of north-west face.

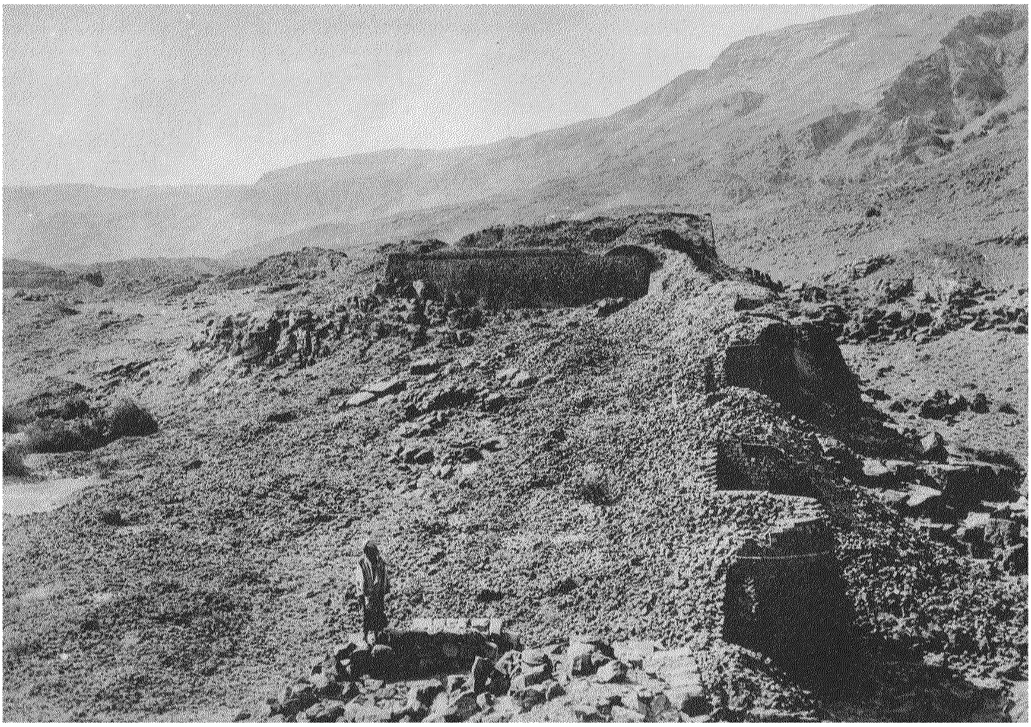
From the western angle above described a strong line of bastions and curtains continues in a north-easterly direction, crowning the rocky rim of the plateau or basin where it faces north-west. This rim about half way to the scarp above the river shows a gap or depression which is clearly visible to the left in the photograph, fig. II. Near the lowest point of this gap lies what evidently was the main gateway of the stronghold. It is badly ruined, but the direction of the approach shows that it was cleverly masked behind a carefully built oblong bastion. Between this gateway and the western corner bastion the wall was strengthened by no less than nine bastions, and still presents a remarkably massive and imposing appearance. All these bastions are semi-circular, with the exception of the one adjoining the gate, and two others towards the western angle. One of the last named, conspicuous on the right of the photograph reproduced in fig. IV, still rises to a height of circ. 44 feet, and in its slanting walls and carefully laid courses of roughly squared slabs shows the features which characterise the greatest part of the circumvallation. The high foundation supporting the front wall, with the broad berm running along the foot of the latter, is also of interest. The view of the breached semi-circular bastion to the left well illustrates a curious detail of construction observed elsewhere in these fortifications, *viz.*, the presence of a separately built internal core of rougher masonry behind the outer casing of well set blocks.

River face of Kafirkot.

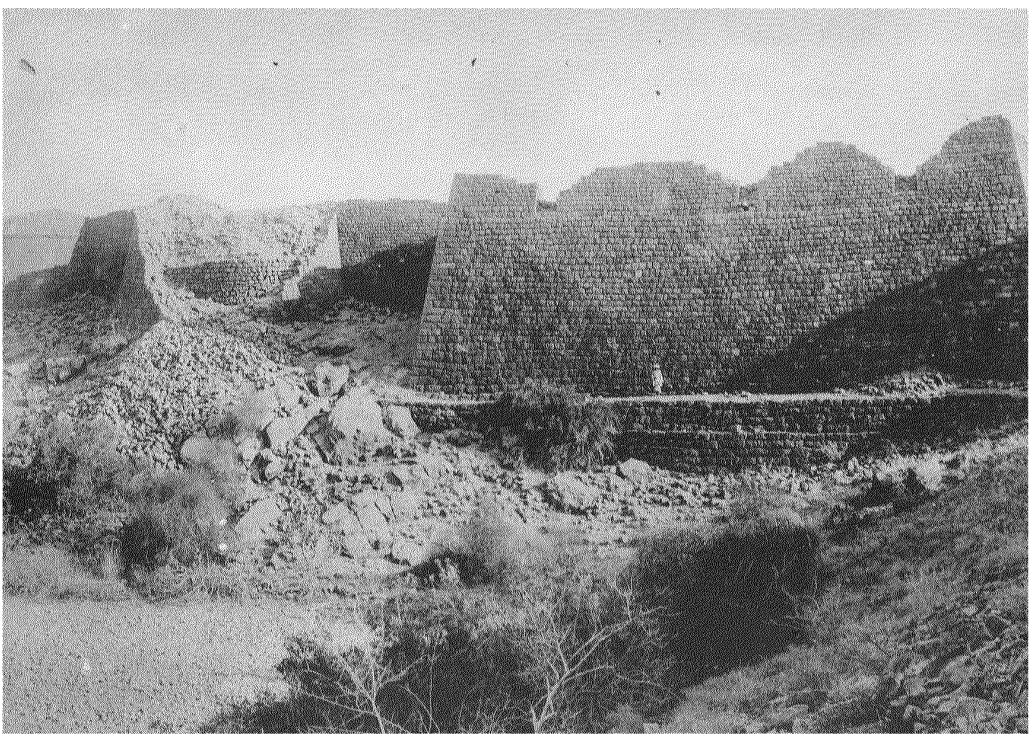
East of the gateway the line of walls ascends again steeply a higher portion of the ridge, reaching its most elevated point in the bastion crowned by the small shrine which is prominent in view, fig. II (marked *D* in General Cunningham's account). From there the wall descends steeply along the edge of the northern side nullah until its trace is lost on the precipitous cliffs falling down towards the river. This part of the north-west face was well protected by the deep rocky gorge in front of it; hence the remains of bastions are here few.

The rocky ruin previously referred to gently descends from the shrine *D* to the south-east until it merges (near the ruined shrine *C* just visible on the left edge of photograph, fig. II) in the level ground of the plateau.

III. WALLS OF KĀFĪR-KŌṬ. SOUTH-WEST FACE.



IV. BASTIONS OF KĀFĪR-KŌṬ. NORTH-WEST FACE.



It is covered thickly with the shapeless débris of ancient habitations. Beyond it towards the river the ground falls off at first with an easy slope, broken by terraces which look as if they had once been cultivated, possibly as gardens. Further down the slope changes into precipitous cliffs which scarcely needed elaborate fortification for their defence.

River face of circumvallation.

As already stated above, the defences of the east face towards the river and above the lower part of the southern side nullah are now completely ruined. But the masses of big blocks and other stone débris, which have to be climbed over when ascending the rugged path from the mouth of this nullah towards the plateau, show sufficiently that they, too, were once considerable. This deep-cut nullah at its mouth forms a small triangular piece of open ground by the river bank, thickly covered with date palms and known as Mian-da-kot. Some 200 yards higher up a solid wall of ancient masonry with a small stone platform in front of it projects to the river's edge. Above it traces of other walls apparently rising in terraces are visible on the very steep slope. The people of the nearest hamlets think that these terraces served for the series of Persian wheels *(jalar)* by which the inhabitants of the stronghold are supposed to have obtained their water-supply from the river, and such a belief does not on the first look appear altogether unreasonable. We know from the Rajatarangini (iv. 191) that King Lalitaditya of Kashmir (eighth century A. D.) was credited with having raised water by a similar contrivance from the Vitasta or Jhelum to the height of the Karewa or alluvial plateau of Chakradhara (Tsakadar). However this may be, it is clear that the fortress required safe access to the river to assure its water-supply, and the walls and terraces still traceable might equally well represent the remains of a covered way intended for that purpose.

Construction of walls, Kafirkot.

The walls of Kafirkot, of which we have now completed the circuit, show very striking differences in their construction. A number of bastions and curtains, both on the south-west and north-west faces, display an outer casing of carefully dressed sandstone slabs, of moderate size, set in uniform courses, and giving an impression of great solidity. Elsewhere we find huge roughly dressed pieces of rock, some times over 5—6 feet in length or height, set in courses or otherwise closely fitted, in the lower portions of bastions, with equally rough, but smaller, stones built up on the top to form a sort of parapet. The best built walls are seen near the gate in the north-west face, where neatly cut white sandstone slabs up to 3 feet in length and 2 feet in height are layed in regular courses. A mode of construction, recalling the type of masonry common in the ancient buildings of Gandhara and Udyana, but rare here, is seen in the second bastion from the south in the south-west face where the wall shows large blocks of rock, evidently quarried near the spot, and often of almost cyclopean dimensions ; roughly dressed on the outer face, but left quite unequal in shape and height, they are piled up and held together by means of columns and layers of smaller stones which fill the interstices.

I have already above referred to an instance where the fall of the solid outer casing of a semi-circular bastion has disclosed an internal core built of smaller and unhewn stones (see fig. IV.). It is curious to observe that a similar round core of masonry is displayed also by several much-decayed oblong bastions of the south-west and north-west faces. This may possibly have been a regular system of building intended to increase the stability of these structures ; else we should have to recognize in it a clear evidence of subsequent repairs and improvements. The varying modes of construction already mentioned are by themselves an indication of different periods of building or else of extensive and repeated repairs. The latter were bound to be frequent owing to the universal absence of mortar and to the steepness of the slopes on which most of the walls were erected, often apparently without adequate cuttings in the rock for foundations or buttressing. The walls everywhere show a strong slant inwards, and consequently must exercise great pressure on the often relatively weak ramparts which support them on the inside. Our present knowledge about the various modes of construction successively practised in this region is too slight to permit of any attempt at fixing even the relative periods to which the

different portions of the Kafirkot fortifications may be assigned. A prolonged and minute study of all the ancient structures found along the Indus and in the Salt Range would be an indispensable preliminary for this purpose.

Temples of Kafirkot.

The greatest part of the area enclosed by the fortifications of Kafirkot, as seen in photograph, fig. II., is covered with heaps of loose stones unhewn or but roughly dressed, which must have belonged to walls of ordinary dwellings. Among these remains of amorphous débris, to which I shall have occasion to refer again, there rise the ruins of four small shrines (visible in the same photograph), of which two (*A*, *D*) are still in relatively good preservation, while of the other two (*B*, *C*) there remains quite enough to permit us to see that they closely resembled the others in plan and style. In the view, fig. II., *D* is seen occupying the highest bastion of the north-west face previously mentioned; *B* just below it on level ground; next *A* a little to the right, and *C* on the extreme right. These little temples possess distinct architectural interest as representing a type which meets us also in the temples of several ancient sites of the Salt Range (Amb, Nandna, Kathwai), but there with additions characteristic of Kashmirian style which are conspicuously absent at Kafirkot. The descriptions and plans which General Cunningham has given of these shrines are generally accurate, and render it unnecessary to furnish a detailed account of each, especially as the photograph of shrine *A* (see fig. VI.) brings out clearly the typical features common to them all.

Decortion of temples.

Each shrine consists of a square *cella*, varying in its interior dimensions from 4 feet 11 inches square in *B* to circ. 12 feet square in *C*, the largest, but also most injured, of the temples. In *A* and *C* the lower portion of the walls is decorated with pilasters showing two rows of small shields in their capitals, as well as with a small central niche on each face. The sloping sides of these niches, found also in *B*, are not unknown to Gandhara architecture. The shrine *D* shows completely plain walls. The most striking feature of the temples is their high and richly carved roofs. These are covered in a succession of courses with an elaborate diaper pattern common also to the Salt Range temples, and resembling a horseshoe or beehive. The small niches formed by this diaper are filled with varying floral designs, while each row of diapers usually rests on a dentilled cornice. In *A* a row of strongly moulded *amalaka* fruits brings variety into this ornamentation. The cella inside shows plain walls surmounted by a hemispherical dome which is formed by overlapping horizontal courses with a carved flower ornament in the centre. The whole of the shrines is built in a light porous limestone resembling 'Kankar,' which on the whole has weathered remarkably well considering that it has lost long ago its original plaster coating. Of the latter traces survive in the relievo decoration of the roof of shrine *D*. A very strong lime binds the regularly carved slabs forming the masonry. Of the objects of worship which these cells once contained no indication remains; but there can be little doubt that they served the purposes of orthodox Hindu cult.

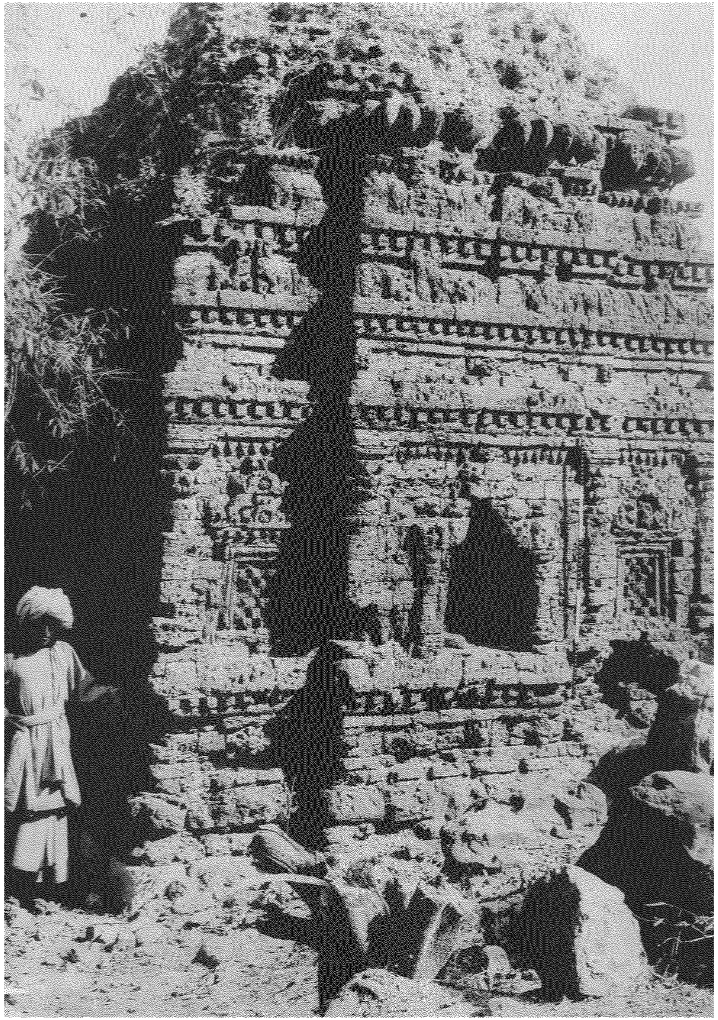
Mari ruin.

Besides these four shrines the interior of the stronghold retains scanty ruins of a double-storeyed residence built in the same material and style and locally designated as *Mari*. It occupies a position close to the eastern edge of the plateau and to the north of Cella *C*. Of the wall facing south a portion circ. 30 feet long still rises to a height over 25 feet, and is adjoined by a much shorter length of the east wall. The walls on the outer face are decorated with corner pilasters reaching to the height of the lower storey, circ. 15 feet, while a broad cornice with dentile ornament runs along the top where the roof once rested. The extant portions of the walls show four high windows in the upper storey, which look as if they had once been arched, while a window or door opens in the lower storey through the extant portion of the east wall. It is impossible to form any opinion as to the original extent of the ruined structure, but its massive construction points to a building of some pretensions and intended for public use.

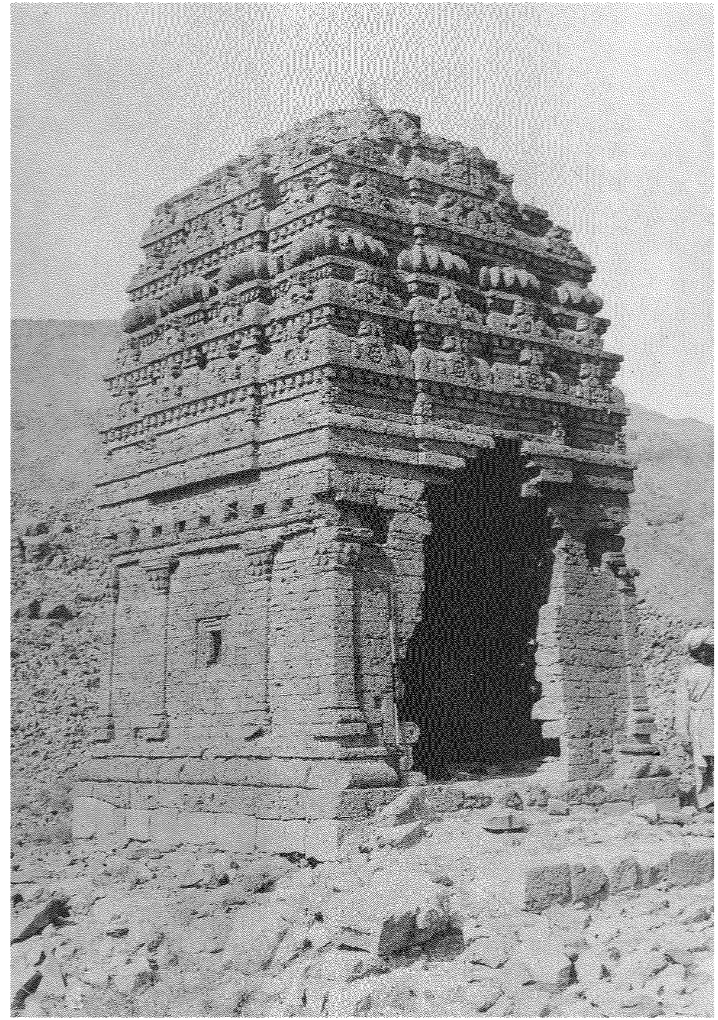
Shrine of Kanjari-Kothi.

At the point where the narrow boulder-filled ravine which skirts the north-west face of the site debouches into the bed of the Indus, there stands a small shrine closely allied in character and style to the shrines in the interior of the stronghold, but more ornate than any of them. It is well known to the

V. KAÑJARĪ-KŌṬHĪ. KĀFĪR-KŌṬ.



VI. SHRINE A. KĀFĪR-KŌṬ.



people by the name of *Kanjari-Kothi,* and easily seen from the river; yet it seems to have completely escaped General Cunningham's notice. The name, "the dancing-girl's dwelling," is connected with a popular legend which attributes the capture and destruction of the "Kafirs' fortress" to the treachery of a fair damsel who dwelt here, and who showed the besiegers a way into the stronghold. The little temple has remained in a fair state of preservation notwithstanding the luxuriant jungle which fills the confined space of this well-sheltered spot. Some trees which were endangering the walls, had to be cut before I could take my photographs. An ancient wall of massive construction protects the temple and the walled-up platform by its side from the torrent which must rush down the ravine after heavy rainfall.

The shrine, which stands only a few yards from the river bank, forms a cella measuring 6 feet 9 inches square inside and 12 feet 9 inches square outside. The front, with the doorway facing towards the river, has suffered more than the other three faces, which show an identical arrangement. As seen in the photograph, fig. V., of the west face, there is a central projection on each face, 6 feet 3 inches long, flanked like the corners of the main wall by small pilasters 4 feet high. The middle of the projection holds a niche 2 feet wide which is surmounted by a relievo decoration showing a beehive or horseshoe diaper above what looks like a rudimentary trefoil arch. Within the central niche is another smaller recess about 1 foot high and 10 inches wide, which has the peculiar sloping sides already noticed above. On each side of the central niche the non-projecting portion of the wall is decorated with a slightly sunk 'blind' niche, 1 foot 3 inches high and 1 foot broad, which also has sloping slides. An arrangement of sunk and projecting cubes gives to these side niches the appearance of barred windows. The relievo decoration surmounting them is an exact reproduction of that above the central niche, except that a smaller beehive or horseshoe diaper fills the opening of the trefoil arch.

Base and roof of Kanjari-Kothi.

The main portion of the cella walls rests on a base about 3 feet 6 inches high, arranged in a series of bold mouldings. The lowest course is formed by sandstone slabs, while the rest of the whole structure is in limestone. A receding frieze about the middle of the base is decorated with fine lozenge-shaped relievo ornaments, while its top is formed by a dentilled cornice. On the pilasters of the main wall rests a kind of entablature, which seems to reproduce in an inverse order the decorative disposition of the base, showing first a dentilled cornice, and above it a frieze ornamented with lozenges, both on a reduced scale. The total height of the cella walls, including base and entablature, is circ. 9 feet 6 inches. Above rises the roof, which originally must have been far higher than it is at present. Its arrangement closely agrees with that of shrine *A*, and shows first a double row of beehive diapers, then a row of boldly moulded *Amalakas*, followed again by a row of 'beehives,' each row being separated from the next by a dentilled cornice.

The walls of the cella inside are quite plain here too, and rise to a height of 5 feet 3 inches above the raised floor. Projecting pendentives, 2 feet 6 inches high, reduce the square of the walls to an octagon. On this rests a hemispherical dome 3 feet 6 inches high, constructed of horizontal courses, with a lotus ornament in the centre.

Decorative style of Kanjari-Kothi.

On the whole I am inclined to believe that the highly ornate shrine of the Kanjari-Kothi presents to us a somewhat later development of the style seen in the temples of Kafirkot itself. The appearance of a rudimentary trefoil arch evolved out of the 'beehive' ornament may be an indication of Kashmirian influence which in the Salt Range tracts on the opposite side of the Indus seems to have obtained a hold since the seventh century A. D. It may be noted here also that remains of the original stucco coating are more frequent in the recesses of the walls of the Kanjari-Kothi than of the other temples; but this may well be due to the ampler protection afforded by the sheltered position of the former, and not necessarily a sign of later construction.

Debris of ancient dwellings.

The remarkable extent to which the interior of Kafirkot is filled with the débris of ancient dwellings as marked by heaps of loose building stones, unhewn or roughly dressed, is well shown by the photograph, fig. II., and deserves our attention. Together with the great quantity of potsherds scattered

over the whole area, it proves clearly that the stronghold must at times at least have held a considerable population. The direction of main walls can often be traced in the lines of stone-heaps, but only in relatively few places are remains of the walls themselves still traceable. These rise nowhere more than 4—5 feet above the present ground level, and show no trace of the use of lime or any hard plaster. Nor did I anywhere among these débris heaps come upon carved pieces of stone recognizable as architectural fragments.

Seeing the construction of the fortifications still standing, the complete ruin of all dwelling places is easily accounted for. Walls built of stones of no great size, which are but roughly hewn and set without any binding material except mud, must decay into heaps of shapeless débris when no longer tenanted and cared for. The sight which the interior of Kafirkot presents, struck me as a very apt illustration of the process by which the remains of that large and once famous site of ancient Rajagriha (now Rajgir) have reached their present condition.* There, too, the building materials used were unhewn or but roughly cut stone. Were the rainfall as large on the middle Indus as between the hills of Bihar, and vegetation on the Khasor Range as plentiful as it is scanty, the débris heaps of Kafirkot, instead of rising bare and clearly recognizable above the natural ground, would long ago have been overgrown by jungle and gradually levelled like those of the ancient capital of Magadha behind its ramparts of rock and wall. On the other hand in the Salt Range, where the physical conditions closely resemble those across the Indus, I found the sites of ancient towns and fortified places, *e. g.*, at Amb, Ketas and Nandna (near Baghanwala, famous in the accounts of Mahmud of Ghazni's campaigns), marked by débris heaps of very much the same type, though nowhere so plentiful.

Purpose of Kafirkot fortress.

I failed to trace either such remains or any appreciable quantity of ancient potsherds outside the walls of Kafirkot, and I see in this negative fact a distinct indication that the latter was indeed occupied primarily as a place of safety. Yet at the same time it would be erroneous to regard Kafirkot as a stronghold built merely for temporary refuge of some ruler, seeing how closely packed its area was with ancient habitations, and having regard also to the manifest care bestowed upon the construction of its places of worship. It seems to me that some useful hint as to the true character of Kafirkot may be derived from its topographical position. We have seen already that an important route, once followed by Fa-hien, lay along the lowest course of the Kurram down to its junction with the Indus, and that its approach from the latter formed as it were the natural gate which any intending invader of Bannu from the Punjab or the Indus Valley would have to pass. A glance at the map shows that a well-garrisoned stronghold in the position occupied by Kafirkot, almost overlooking the debouchure of the Kurram, would have protected that gate by effectively flanking it. No invasion of Bannu from the east could have been safely attempted without first reducing Kafirkot.

Importance of position.

Nor can we ignore the value of the position with regard to the important line of communication which the Indus itself represented from early days both for commerce and military enterprise. We may safely assume that the trade of Bannu and the Upper Kurram with the Indus Valley and the rest of India always followed the shortest route down to the great river, and thus passed close below Kafirkot. In the same way the latter would have probably played an important part also in the event of military operations from the south; for we know that even the far-reaching raids of the early Arab conquerors of Sind generally followed the line of the Indus and took advantage of the facilities for transport which the latter offered.† Finally, it may be pointed out that Kafirkot might well have served also as an administrative centre for the fertile riverine tract comprised in the present Tahsil of Isa Khel, which, though at present separated from Bannu and the North-West Frontier Province, was yet by its geographical position marked out for political dependence on the former. Fa-hien's narrative shows, in fact, clearly that in his days, and probably long after, the territories ruled from Bannu *(Po-na)* and Bhera *(Pi-tu)* were divided by the natural boundary of the Indus.

* For a brief descri[ption compare Stein *Notes on an archaeological tour in Bihar,* 1901, pp. 3 *sqq.*

† Compare Marquart *Eran-shahr,* p. 271, Reinaud, *Memoire sur l'Inde,* pp. 195 *sq.*

That the site of Kafirkot must have been abandoned before or about the time of the final Muhammadan conquest of these regions under Mahmud of Ghazni is sufficiently indicated by the total absence of any Muhammadan remains by the side of the ruined Hindu temples. But no more precise dating seems possible at present. Of the period to which the temples belong, it is probably safe to assert on architectural grounds that it cannot well be earlier than the eighth nor later than the tenth century of our era. But the date of the temples, even if it could be more accurately determined, would not furnish any certain guide as to the age of the various portions of the fortifications. I did not hear of any inscribed stones having ever been discovered among the ruins, nor are finds of coins reported by the villagers. The difficult nature of the ground and the distance of the site from any large settlement have, together with the dryness of the climate, helped to protect the ruins, which seem to have undergone little, if any, change in condition since General Cunningham's visit. Period of Kafirkot ruins

SECTION IV.—ANCIENT REMAINS IN HAZARA.

Before proceeding to an account of my archæological tour in the Mahaban region I may briefly record here some antiquarian observations which I had occasion to make on my passage through the Hazara District in May and October 1904. On paying a visit to Asoka's famous rock inscription in Kharoshthi near Mansehra my attention was attracted by the curious position which had been selected for engraving the edicts of the ancient Emperor. The large blocks of stone bearing the inscription are situated on a small rocky spur strewn with boulders about one mile to the west of Mansehra. The immediate surroundings could never have been occupied by habitations, nor does any important route lie by it as in the case of Asoka's other well known rock inscription near Shahbazgarhi. Nevertheless I noticed that the narrow track on the left of the Butikatha Nullah, by which the spot is reached from Mansehra, passes over traces of what looks like an ancient road. They consist of narrow walled-up terraces constructed of massive roughly-hewn stones at points where the rocky face of the spur is too steep or slippery for a convenient passage. The rocks bearing the main portion of the inscription lie some 50 yards above this old path. On enquiry I ascertained that the direction followed by the latter coincides with the most direct route leading from the town of Mansehra to the Tirtha of *Breri*. The latter is situated on the top ridge of a very prominent spur, the highest point of which is marked with the name 'Briari' as a triangulation station, 4,587 feet above the sea, in the Atlas of India, Sheet No. 28. It lies circ. 5 miles in a straight line to the north-west of Mansehra. Asoka's rock edicts near Mansehra

In the name *Breri* I at once suspected a congener of the Kashmiri *brar* (stem *brari*), 'goddess,' the direct derivative of Sanskrit *bhattarika*, which is very common in the names of Kashmirian Tirthas sacred to various manifestations of Devi or Durga.* I was hence by no means surprised when subsequent enquiries among the Brahmans of Pakhli showed that it is, indeed, 'Devi,' *i. e.* Durga, whose '*svayambhu*' or "self-created" form is worshipped there in a large rock prominently rising above the sky line of the highest ridge of the hill.† According to the information supplied to me by Pandit Ramkishan of Baffa, the Tirtha is frequented on the Durgashtami days of Chaitra and Asvayuja by many Hindus from Pakhli, Urash (the ancient Urasa) and other tracts of Hazara. The 'Durgahoma' is performed for the pilgrims by regular Pujaris of the Tirtha living at Mansehra. The tirtha of Breri

There can be no reasonable doubt that the worship of this site as of all such Tirthas in the mountains in and around Kashmir is of very ancient date (the local name itself, quite unintelligible now to the people, is evidence of this), and thus the curious place selected for engraving the Emperor's edicts can easily be accounted for. Given the popularity of the

*I have fully discussed the Kashmiri word *brar* and its application in my *Rajatarangini* translation Vol. II, p. 276, n. 7.

† Regarding this ancient worshipo of natural objects, especially curiously formed rocks,as manifestations of Hindu divinities, see my notes *Rajatarangini,* i, 113; ii, 136, II pp. 341, 344, etc.

Tirtha and the fact that the pilgrims from the most thickly populated parts of the Hazara District would, as the map shows, necessarily have to approach it *viâ* Mansehra, it is easy to see that the local administrators were doing full justice to the Emperor's intentions when committing his moral precepts to the stone at a spot which so many of his subjects would have occasion to pass. It is scarcely necessary to point out that the position selected for Asoka's rock-edicts at Junagadh on the road to the sacred shrines of Mount Girnar supplies an exact parallel.

Site of Bedadi.

Coins which I saw at Baffa and information subsequently received as to their find-place, lead me to conclude that a site of considerable antiquity, though not necessarily a large one, must exist near the small village of Bedadi, on the Siran River, some 12 miles by road to the north-north-west of Mansehra, and circ. 3 miles south of the large village of Shankiari. Among the coins seen by me there were, besides numerous specimens of the coinages of Azes (first century B. C.) and the Hindu Shahis of Kabul, a fine silver coin of Augustus and several pieces of the 'nameless king' who calls himself Soter Megas in his legends. Also coins of the early Kushan or Indo-Scythian kings seem to be picked up frequently after rain in small ravines which intersect the terraced fields of Bedadi. No structural remains of any kind are said to be visible above ground. I have so far not been able to spare time for an examination of the locality, but do not doubt that the site which is well known throughout Pakhli for its coin-finds, though not to my knowledge previously noticed, goes back to the period preceding Indo-Scythian rule.

Coin find at Maira.

At the suggestion of Major Thompson, Deputy Commissioner, Hazara, I paid a visit to the hamlet of Maira, situated in the valley immediately below the hill-station of Thandiani, in order to look for ancient remains supposed to exist at the spot where a find of over 50 well-preserved gold coins of the Later Kushan type had been made in May, 1904. My examination showed that at the actual find-place, in a field adjoining the part of the hamlet known as Yusuf Khan's Banda, there were no ruins of any kind, the stones and rocks turned up during subsequent diggings of the villagers and local officials being purely natural. On the other hand I traced remains of old walled-up terraces about half a mile to the south-east of the hamlet on a narrow and steep ridge known as Kota. As the construction of these terraces is of the coarsest kind, rough stones having been used without any attempt at courses or regular layers, it is impossible to form any opinion as to their relative antiquity. They have certainly been constructed for the purpose of gaining level ground for cultivation, and probably also dwellings; at present the ridge is entirely unoccupied by fields or huts. It is quite possible that the old terraces go back to the period when the gold coins were buried, which, in view of the excellent preservation of the latter, may be approximately estimated from the fifth to the seventh century A. D. In any case it is interesting to have evidence that a locality so elevated—the hamlet can scarcely be less than 7,000 feet above the sea—was already occupied about that period. Of the total hoard eight gold coins were secured for Government and assigned for distribution among Museums in India.

Kaghan.

During my stay in Kaghan, the alpine portion of the Kunhar Valley, I did not succeed in tracing any remains or even traditions of certain antiquity. It is probable that a considerable portion of the valley, like the alpine tracts on the Kishanganga adjoining it eastwards, was at one time or the other dependent on the old Hindu rulers of Kashmir; but its relative poverty and its secluded position made it evidently too unimportant to be ever mentioned in the Sanskrit Chronicles of Kashmir. Even the ancient name of the Kunhar (Sanskrit *Kusnari*) is known to us only from Alberuni.* Some remains of hard pottery pipes which were shown to me near the mountain hamlet of Rawalkot above Kaghan village, and evidently served for conducting the water of a neighbouring spring, may, however, be old; no arrangements of that kind are known any longer in the valley.

Local names, in the absence of any historical records reaching back further than the last century, cannot claim much value from the antiquarian point of view. Yet it deserves attention that while the whole of Kaghan

* See Stein, *Rajatarangini* translation, II, p. 361.

is now occupied or grazed over by Gujars, tenants of the Pathan Saiyid families, who are said to have conquered the valley in the eighteenth century, there are numerous local names in the northernmost part of the valley (Burawai, Kotawai, Gitidas, &c.,) which are of unmistakably Dard origin. The Dards still hold, as probably since very early times, all the ground north and west beyond the watershed towards the Indus. As they are to be found also to this day on the Upper Kishanganga down almost to Shardi, which can be reached easily by summer-passes from several of the side nullahs of the Upper Kaghan Valley, it is quite possible that once the latter, too, belonged to Dard territory. It must, however, be pointed out that Shardi itself, the site of an ancient Kashmirian shrine and of a hill stronghold which was the scene of a memorable siege in the twelfth century, appears to have been in pre-Muhammadan times a northern outpost of Kashmir, wedged in, as it were, between the Dards of Chilas and those of the Upper Kishanganga about Gurez.*

The Kaghan Valley route.

It may be noted here in passing that the most direct, and probably the easiest, route from Kashmir to Gilgit, Yasin and Chitral leads *viâ* Shardi and the head waters of the Kunhar River into Chilas. Since the opening up of Chilas in 1892 the importance of the Kunhar Valley as a convenient military route to Gilgit and the other territories south of the Hindukush has been fully recognized by the construction of a proper road. Is it possible that the route leading *viâ* Shardi into Upper Kaghan and hence over the Babusar Pass into Chilas, served already for the transport of those supplies from Kashmir, which alone, as we now know from the Annals of the T'ang dynasty, enabled the Chinese to maintain their garrison in Yasin and Gilgit after Kao Sien-tche's memorable conquest of these territories in 747 A. D.?† I have discussed this interesting episode in the history of the Hindukush region in the Detailed Report of my Turkestan explorations of 1900-01, and may refer to this forthcoming publication for all topographical and antiquarian details.

Section v.—Survey of Mahaban Range.

Rerasons for Mahaban tour.

The tour which in the early autumn of last year enabled me to explore the ancient remains of the Mahaban Range, together with its actual topography, realized a plan I had eagerly cherished for long years. In that mountain tract beyond the north-eastern border of the Peshawar region, hitherto unsurveyed and inaccessible to Europeans, two archæological tasks of exceptional interest for the ancient geography of a fascinating region invited solution. One was closely bound up with the elucidation of a celebrated event in the story of Alexander's invasion, while the other concerned a site equally famous in that Buddhist *topographia sacra* of Gandhara to which Hiuen Tsang and the Chinese pilgrims preceding him had devoted so much pious attention.

Alleged site of Aornos.

For more than half a century a theory, first advanced by the late General Abbott, had sought on Mount Mahaban that celebrated rock fastness of *Aornos*, the capture of which figures so prominently in all classical accounts of Alexander's campaign on the Indian frontier.' The identification was based on the agreement which the general features of the mountain as far as they could be realized from a distance, such as its position relative to the Indus, its great height and extent, seemed to present with the statements of Alexander's historians. The claims of Mahaban naturally gained in favour when one after another the rival theories which tried to locate Aornos at 'Raja Hodi's Castle' opposite Attock, at the ruined stronghold of Ranigat or on Karamar Hill, had proved critically untenable on closer examination of these sites. Yet as long as the heights of Mahaban continued to remain as inaccessible to Europeans as in the days when General (then Major) Abbott had gazed at them from the distant Hazara hills, it was manifestly impossible to verify the proposed identification "by that detailed topographical evidence without which," as I had pointed out years ago, "it seemed hopeless to expect a definite settlement of this much vexed question."‡ On this account I had been

*Compare regarding Shardi and its ancient shrine of S'arada my notes *Rajatar.* II, pp. 282 *sqq.*, 320 *sqq.*

†Compare for the Chinese occupation of Yasia, Gilgit and Chitral M. Chavannes' masterly publication *Documents sue les Turcs occidentaux* (St. Petersburg 1903) pp. 151 *sqq.*, 214 *sq.*

‡ See my *Detailed Report of an archaeological tour with the Buner Field Force* (Lahore 1898) p. 46.

very eager to ascend Mahaban already in 1898, when the march of the Buner Field Force had brought me relatively near to the northern foot of the range. But military considerations then frustrated my hope as elsewhere related.*

Buddhist topographia sacra.

It was on the same occasion that the importance of the Mahaban region also for Buddhist sacred topography first suggested itself to me. In the territory of Buner, which that short campaign had temporarily opened for a rapid archæological survey, it had been relatively easy for me to trace and recognize the remains of a number of sacred sites mentioned by the Chinese pilgrims to the south of Udyana or Swat. All the more I regretted that the fact of the slopes of Mahaban having remained outside the scope of General Blood's operations had prevented me from looking there for the ruins of another and more famous sanctuary, that of 'Buddha's body-offering,' which the account of at least one of the pilgrims, Song Yun, unmistakably placed in that direction. It will be seen below how this surmise was revived and greatly strengthened by a recent publication of M. CHAVANNES, in which that distinguished Sinologist has for the first time critically elucidated Song Yun's narrative with his unrivalled knowledge of Chinese itineraries and historical texts.

Tribal arrangements for Mahaban tour.

My desire to visit Mahaban had from the first received kind encouragement on the part of Colonel DEANE, under whose instructions Mr. PIPON, C. S., in political charge of the Yusufzai Border, commenced early in the year the needful tribal enquiries. The plan of the tour could be contemplated only with the voluntary concurrence and under the protection of the Gadun tribe, which holds the greatest part of southern slopes of the range, and arrangements were considerably complicated in the first place by a serious and long-continued feud which divided the two main sections of the tribe, the Mansur and Salar Gaduns. The conclusion of tribal peace, or at least a temporary compromise between the two fighting sections, was a *conditio sine quâ non* for the realization of the plan. When this had been secured towards the close of the hot weather through the active co-operation of the Political Officer, it still remained to convince the headmen of both sections of the wholly non-political character of my visit, and to arrange through them for that tribal protection which was doubly essential in view of the fact that no escort of any kind was to be taken.

On the crest line of Mahaban the territory of the Gaduns meets with that of the Khudu Khel tribe on the west and faces the border of the Amazai clan, which holds the northern and north-eastern slopes of the main range. The grazing claims of the several tribes had more than once given rise to armed conflicts. In order to obviate misapprehensions which might possibly have led to tribal encounters on the very ground it was my object to reach and survey, it became necessary to open negotiations with the Jirgas of these two tribes also. Finally the circle of tribal diplomacy had to be extended still further to the Utmanzai clan holding some of the ground between the right bank of the Indus and the main south-eastern spur of Mahaban since I was anxious to effect my descent along the latter. Apart from regard for the completeness of the intended topographical survey, some lucky antiquarian instinct guided me in chosing this route; for it will be seen thereafter that without my insistence on the latter the most interesting of the old sites about Mahaban might have remained unnoticed still longer.

I have thought it necessary here to refer to these details in order to make it quite clear to readers unacquainted with political conditions on this part of the frontier what amount of patient care and tact was needed on the part of Mr. Pipon to assure the successful completion of all "tribal arrangements." Nor would it be right to pass over in silence the most effective assistance given in regard to all these arrangements by Akbar Khan, Khan of Topi, and Abdul Qadir Khan, Khan of Jhanda. Being the hereditary representatives within the British border of the Salar Gadun and Mansur Gadun-tribes,

* Compare Stein, *Report of an archaeological tour with the Buner Field Force*, pp. 47 *sq.*

respectively, the two Khans, whom I am able to call old personal friends, united their best efforts in order to remove any tribal suspicions and other obstacles to the proposed tour, and to secure faithful adherence to the undertakings once given. Their company throughout the tour proved in every way an effective safeguard and help, and I am glad to know that their zealous and faithful services have already been duly noted by the Local Government.

Preliminary complications.

On October 10th I received at Mansehra from Mr. Pipon the welcome news of the completion of the tribal arrangements, and fixed the 28th of the same month for the start across the Mansur Gadun border. Before this, however, could actually be effected, opposition arising from an unforeseen quarter threatened for a time to wreck the whole plan. Rumours spread on the Hazara border towards the Black Mountain, soon confirmed by official reports from the same quarter, credited the Hindustani fanatics, now settled at Kabalgram, some 30 miles north of Mahaban, with endeavours to rouse tribal feeling against the proposed visit and with the intention of opposing it in arms. Reliable information showed that efforts had undoubtedly been made by, or through, that once troublesome colony of religious fanatics to stir up opposition to my tour, the non-political object of which probably found little credence even among the tribes favourably disposed to it.

But whether the efforts were due to genuine excitement among the Hindustanis, who previous to the Ambela campaign had their stronghold at Malka, on the northern scarp of Mahaban, or to intrigue from another side which need not be specified at present, it is certain that they signally failed in their object. Neither were the tribes sharing control of Mahaban induced to go back upon their promise of friendly protection, nor was the abandonment of my tour brought about by the periodical recurrence of the threatening rumours. The latter succeeded, however, in imparting to the preparations for a harmless archæological enterprise that air of uncertainty which can never be absent from any undertaking across the Afghan tribal border. Consequently there remained until the very eve of the start the harrowing doubt as to whether the plan would not in fine have to be abandoned from 'political' considerations; for I fully realized that, whatever antiquarian attractions Mahaban could offer to me, tribal complications were not to be risked for their sake.

Topographical survey.

At Peshawar I was joined by Surveyor Lal Singh, whom Colonel F. B. Longe, R. E., Surveyor-General of India, had upon my request been kind enough to depute with me at very short notice in order that the opportunity of my tour might also be utilized for mapping the tract to the south and east of Mahaban which figured as "unsurveyed" even in the latest edition of the "Northern Trans-Frontier" maps of these parts.* Mr. Pipon, who had kindly offered to accompany me on my tour, awaited me at Swabi on October 25th. Together with Surveyor Lal Singh I used the short march of the following day to Jhanda for familiarizing ourselves with the most prominent points, some of them already fixed by triangulation, of the Mahaban Range which from the commanding height of the Panjpir hill lay clearly before us at a distance of circ. 20 miles. Even from this distance I could see through my field glasses that the highest part of the range marked on the maps with the triangulated height of 7,380 feet shows a double summit, and that a long-stretched spur with relatively easy slope descends from it due south. Another great spur running down to the south-east towards the Indus showed a far more broken appearance. In it a rugged peak rising precipitously not far from the Indus, also triangulated (4,450 feet), and subsequently identified as Mount Banj, particularly attracted attention by its towerlike rocky summits.

On October 27th, the day fixed for the assembling of the Mansur Gadun Jirga at Jhanda, I made a detailed survey of some ancient remains in the immediate vicinity of this our starting point within the border. Apart from the interest of the ruins, the task was very useful as a practical demonstration to the tribesmen of the work intended by me across the border and of the need for surveying instruments in connection with it. Their use might otherwise have raised doubts as to the real object of the tour.

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*See Northern Trans-Frontier Sheet No. 36 (2 miles to 1 inch); also Northern Trans-Frontier Sheet No. 3; S. W. (4 miles to 1 inch).

Ancient well, Dilawar.

The first ruin visited was that of an ancient well situated among terraced fields at a spot known as Dilawar, circ. 1¼ miles to the east-south-east of Jhanda village. The well which is still in a very fair state of preservation, is round, with a diameter of 11 feet, and shows at present a depth of 62 feet. The masonry lining is of the fashion peculiar to the pre-Muhammadan buildings of Gandhara and Udyana, but remarkably regular, and by far the most finished of its kind I have seen anywhere. It shows a succession of double courses. The upper one consists of roughly squared blocks, circ. 7 inches high and varying in length from 8 to 11 inches, with neatly packed columns, formed of small flat stones and circ. 4 inches broad, separating each block from its neighbour in the same course. The lower course appears as a regular band, circ. 4 inches high, formed of slabs of varying length. Near the mouth of the well these are from 5 to 11 inches long; but lower down slabs of the same kind up to 2 feet in length are visible. Great care seems to have been taken to avoid the joints of alternate lower courses and the columns in the interstices of alternate upper courses ever falling one above the other. Formerly a little water collected at the bottom of the well, and the cultivators endeavoured to clear it; but as large blocks of stone turned up at the bottom the work was abandoned. This statement was made to me in support of the popular belief heard also elsewhere that the 'Kafirs' had purposely closed the old wells to prevent their use by the victorious Muslims. The sinking of the level of subsoil water since pre-Muhammadan days is a far more likely explanation. This is the largest well of ancient construction with which I am acquainted within the limits of Gandhara and Udyana, the nearest to it in width being the one near Sunigram, in Buner, with a diameter of 8 feet. Ancient wells of smaller size are generally square.

Ruins of Sale-dheri.

About 1 mile to the south-south-east of Jhanda, on the top of a narrow rocky ridge which forms the last offshoot of the Ajmir hill, there rises at an elevation of circ. 200 feet above the fields of Jhanda a ruined structure, in which we may in all probability have to recognize the remains of a small Buddhist convent. I had seen it first on a rapid tour made in January, 1900, along this part of the border. The ruin is known by the name of *Sale-dheri*, and consists of a rectangular structure (see plan i.) built of roughly hewn slabs in the usual style of ancient Gandhara masonry. The building is approximately orientated, and occupies the whole available space on the top of the ridge. It shows an enclosing wall 89 feet long on the north and south faces, with a length of 86 feet on the east and west. This enclosing wall is 5 feet thick, except on the north face, where its thickness is 5 feet 6 inches. From an interior court, which was approached by a single gate, 9 feet wide, near the middle of the north face, small cells opened on all four sides. Apart from the four corner cells measuring each 17 feet by 8 feet 3 inches, there are four cells each on the east and south sides, and three cells each on the north and west sides. The interior of the cells ranged along the north and south walls measures 8 feet 3 inches square, while those on the other sides form squares of 7 feet 9 inches. The entrance to each cell is 5 feet wide; the walls dividing the cells are 4 feet thick. The west side, in addition to its three small cells, shows next to the south-west corner cell a small room, also 7 feet 9 inches square, which has no entrance from the level of the court and may be supposed to have served as a store-room for grain. Its floor, disclosed by recent diggings of the Khan of Jhanda, lies 5 feet below the present level of the court. The walls rise nowhere more than 6—7 feet above the latter, and are in many places far lower. Hence it is only in four cells, facing west and south, that the windows which probably lighted each cell from the outside, can still be traced. These windows opened through the enclosing wall opposite to the entrances. They stood circ. 5 feet above the present level of the floor, were 3 feet broad on the inside of the wall, and show signs of having been strongly bevelled inwards both below and on the sides as in the case of the ruined monastery of Panjkotai, Buner.*

No pieces of carved stone work or plaster can be traced among the ruined walls, and according to the assurance of the Khan of Jhanda his diggings have brought to light neither sculptures nor any other finds. Of a chapel or Stupa

*See *Report on archaeological tour with Buner Field Force*, p. 35; pl. VII.

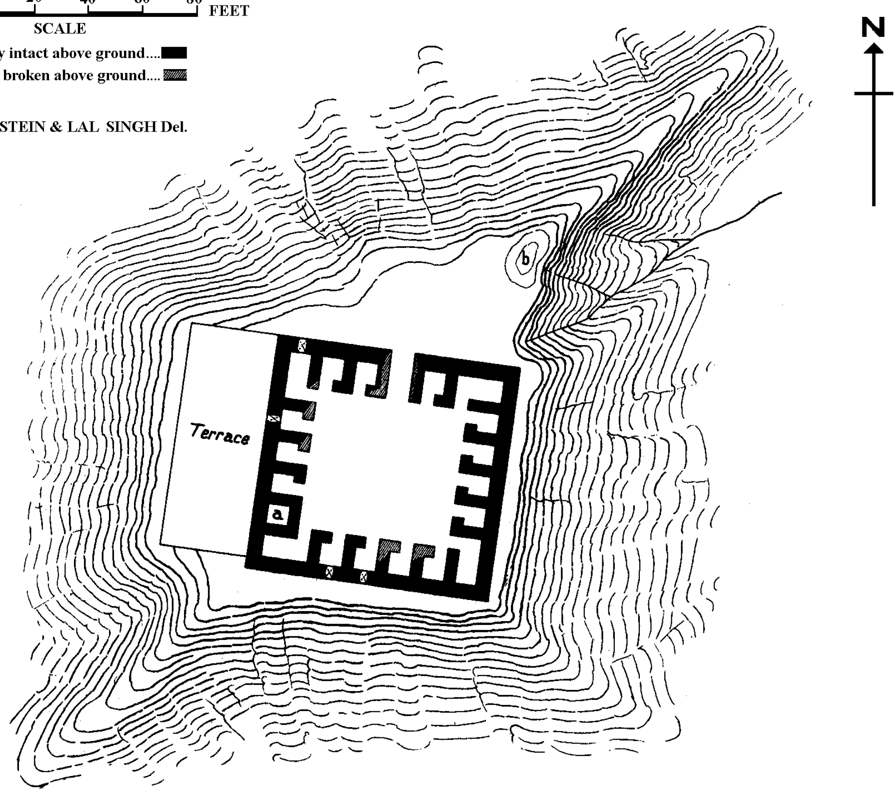
1.

PLAN
OF
SALE-ḌHĒRĪ
NEAR JHANDA

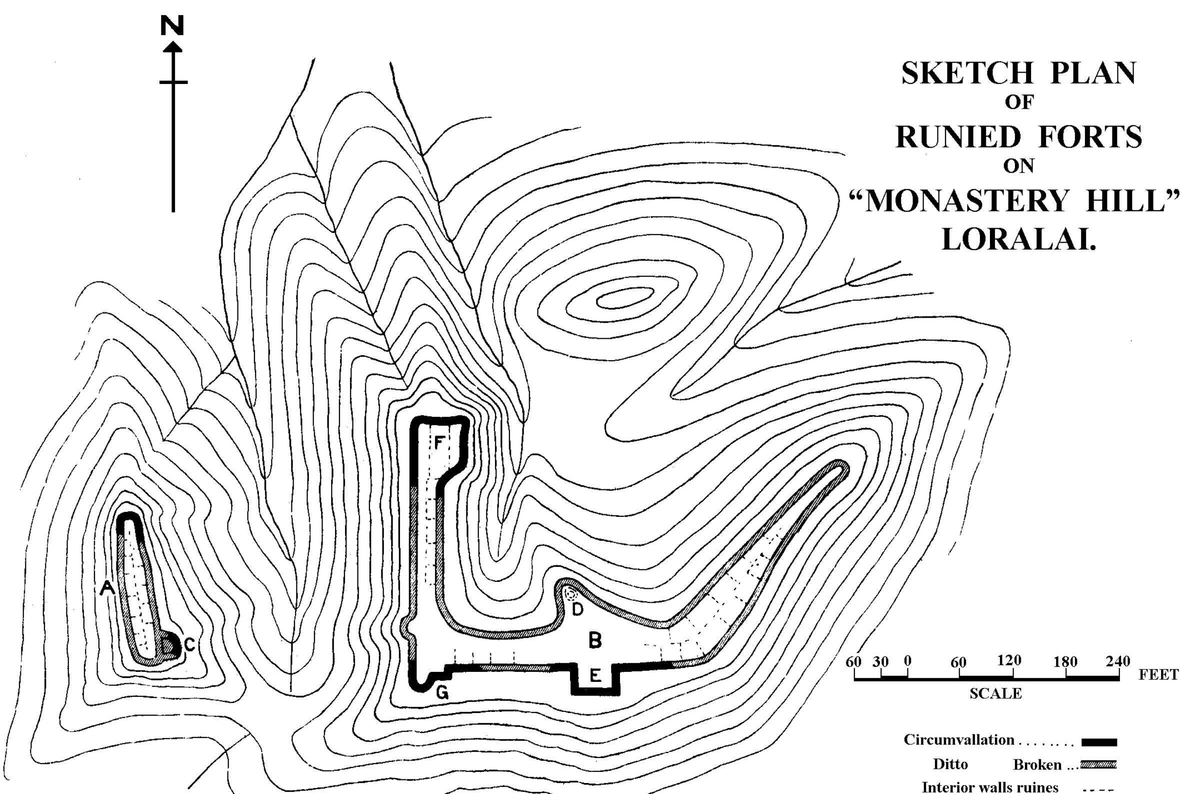
20 10 0 20 40 60 80 FEET
SCALE

Masonry intact above ground....
ditto broken above ground....

M. A. STEIN & LAL SINGH Del.



SKETCH PLAN
OF
RUNIED FORTS
ON
"MONASTERY HILL"
LORALAI.



60 30 0 60 120 180 240 FEET
SCALE

Circumvallation . . . .
Ditto Broken ...
Interior walls ruines - - - -

M. A. Stein Del.

such as might be expected near a monastic dwelling no clear indication survives. But it is possible that a small rocky knoll rising in front of the ruin, at a distance of about 20 yards to the north-east of the gate, to a height of circ. 15 feet, had once served as the base for a small stupa. In the absence of other evidence the suggestion of the ruin representing a small convent rests solely on the characteristic arrangement of the interior and on the position which the building occupies. This necessarily recalls the position of many a convent found on insolated spurs in the Peshawar and Swat valleys. It may be added that like most of these structures the Sale-dheri ruin is adjoined by a large terrace built up along the west face with a breadth of 32 feet.

Route from Jhanda to Lehran.

On the morning of October 28th we set out from Jhanda accompanied by a Jirga of Mansur Gadun Maliks and their armed followers. In order to reduce *impedimenta* as much as possible, our own camp, apart from Surveyor Lal Singh and my temporary Assistant Subadar Jagat Singh, was limited to two servants. The route followed beyond Panjman, the last British village, lay in the winding nullah of the Kundal Khwar, which drains some of the south-western spurs descending from Mahaban. A little beyond the deserted village site of Kundal, about 1½ miles north of Panjman, I was shown a much-decayed well almost buried in the ground which, judging from its masonry, must be ancient. It was round with a diameter of circ. 5 feet. On a low ridge to the east remains of a few old houses were said to exist, but as it was important to push the same day as far as possible towards Mahaban, I did not wish to delay our march by an examination of these scanty ruins. The gorge of the Kundal Khwar, which as we ascended became plentifully clothed with brushwood, passed close along the border of Khudu Khel territory. There picturesque Jirgas from the Osman Khel section of the tribe holding the nearest tracts came to join our escort. When ascending the Sanjah spur which divides the Lehran branch of the Kundal Khwar stream from a more westerly affluent, a very clear view opened on a big spur westwards which descends from the Mahaban Range near the Ashraf Pass. It bears near its northern end the Khudu Khel stronghold of Mangal Thana, which figured in 1856 as the goal of a separate small frontier expedition. Some five miles lower down an isolated shoulder of the spur rising prominently on the sky line was pointed out to me as *Charkot*, a site covered with ruins of 'old houses.' As to the character of these ruins, which lay too far off the route to be visited, no clear indication could be obtained from the tribesmen.

Ancient remains near Lehran.

When after a march of some 12 miles we reached *Lehran*, a picturesque village of about fifty houses, ensconced among fruit trees and situated circ. 2,700 feet above the sea, a halt became necessary. Laden animals could not be taken further, and the democratic organization of our hosts, the Mansur Gadun Maliks, seemed for a time wholly paralyzed by the task of providing the relatively small number of men needed for carrying indispensable loads, and of finding food for the swelling crowd of their own armed followers. I utilized the delay for the examination of some ancient remains which had been reported to me in the vicinity. I found them to be situated in a small rocky nullah known as *Voloserai Darrah* opening to the west of the main valley about 1½ miles below Lehran. Ascending at the bottom of the defile I traced among the fairly thick brushwood successive terraces of undoubtedly ancient construction connected by paths paved with large blocks. Judging from the débris heaps of uncut stones found here and there, these terraces seem to have been built for the purpose of affording room for dwellings which, themselves but roughly constructed, had decayed long ago.

Where the nullah comes to an end below steep hill slopes the remains of a more solidly built ancient structure could still be made out. They consist of walls built in the usual Gandhara fashion, which seem to have formed a cella measuring circ. 10 feet square inside. The walls now rise only a few feet above the débris-strewn ground, and the north-west face, which may have contained the entrance, has almost completely disappeared. A find of gold coins is said to have been made some years ago by digging on this side. Below the cella are traces of other ancient walls which seem to have formed a base or terrace. Skirting on my return the rocky slopes along the nullah, and then

those from its mouth along the west side of the main valley towards Lehran, I passed numerous other terraces built up with supporting walls of rough, but manifestly ancient, construction. It was quite evident that they must have been built when a denser population inhabited the valley and dwellings would readily be relegated to steep slopes, however inconvenient for building, in order to spare all available level ground for cultivation.

Ascent from Lehran.

By the time of my return to Lehran the Maliks had not yet settled their difficulties; but our insistence secured at last a start, and after a stiff climb over terraced fields and by very rough tracks we arrived by nightfall at the little hamlet of Mazghund, situated near the head of the Lehran Valley and circ. 3,700 feet above the sea, where there was just enough level space to pitch our small tents. The path followed next morning led first steeply up the narrow valley, and then ascended over slopes clothed with cedars north-eastwards to Miyagai-Kandau, a saddle of the spur which separates from the main Mahaban Range at a point about halfway between the two summits shown with the triangulated heights of 6,780 and 7,380 feet, respectively, in the available maps, and thence descends to the south. From Miyagai-Kandau, which we reached within an hour's climb from Mazghund, and which lies at an elevation of circ. 5,100 feet, the Gadun Maliks sent ahead most of their tribal following.

The crest of the main range was now rising in full view before us, and previous to ascending it our hosts were reasonably anxious to assure themselves that no opposition was being prepared from its northern slopes belonging to Amazai territory. Of the Jirga of the Amazais, whose presence on the crest was to be expected as a sign of friendly acquiescence in our visit, there was as yet neither sign nor message.

Kandaro-sar.

The interval needed for "crowning the heights" allowed me to visit a detached rocky knoll rising on the continuation of the spur southwards about a couple of hundred feet above the Miyagai saddle. As its name *Kandaro-Sar* shows, it bears some ruins of buildings; but the remains of walls still traceable on the confined rocky summit, though undoubtedly old, were far too decayed and rough in construction to present much interest. They showed a thickness of 4—5 feet, and were built, as far as I could see, entirely of uncut slabs evidently dug up on the spot. Yet the large size of the slabs and the dimensions of the few apartments still distinguishable, up to 40 by 25 feet, exclude the idea of their being of recent date.

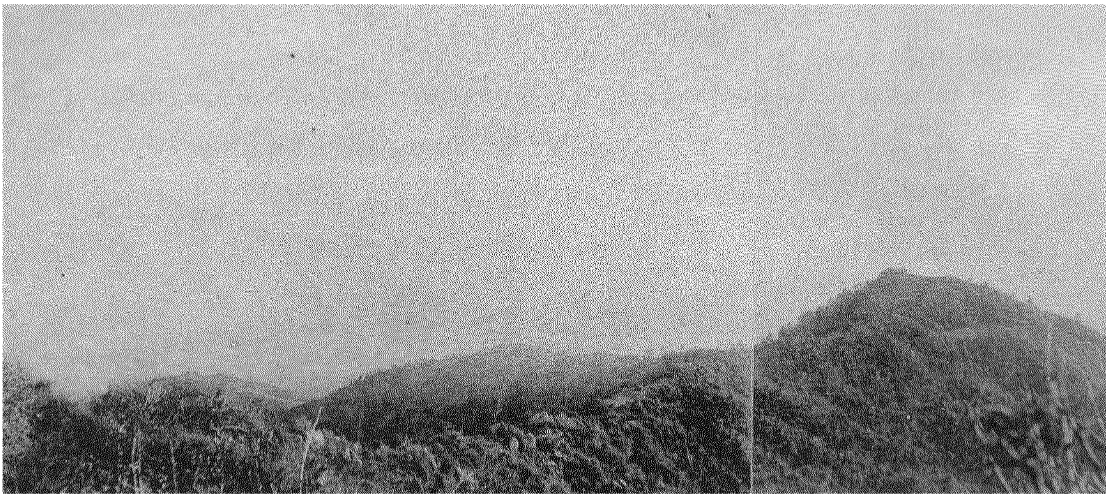
View of Mahaban from Lar.

But more interesting than these scanty remains was the excellent view which the knoll offered both over the lower slopes of Mahaban southwards and of the main range above us. The long-stretched crest of the latter running in its general direction approximately from north-west to south-east was visible, at a distance of less than two miles, from the highest summit of Mahaban (7,380 feet above the sea) to the point where the *Lar* spur bearing Miyagai-Kandau and Kandaro-Sar branches off. The eastern portion of this view is reproduced in photograph, fig. VIII. This shows, a little to the left of the middle, Shahkot, the culminating point of the range; and to the right of it and nearer Silosar, the lower of the twin summits of Mahaban as seen from the Yusufzai plains. This was found to rise a short distance to the south of Shahkot to an approximate elevation of 7,200 feet. Silosar (shown again by photograph, fig. VII, as seen from the top of Shahkot) forms the point where the spurs of Utlai and Gabasanai unite before joining on to the main range at Shahkot. The Utlai spur, called after the nearest village situated on it, is seen on the right of photograph, fig. VIII. It descends due south as already noted before, with a remarkably uniform slope and relatively broad crest, and thus forms what is acknowledged to be the easiest approach to the main range. The Gabasanai spur, which descends from Silosar in a somewhat more south-easterly direction, and will be referred to again, is almost as easy.

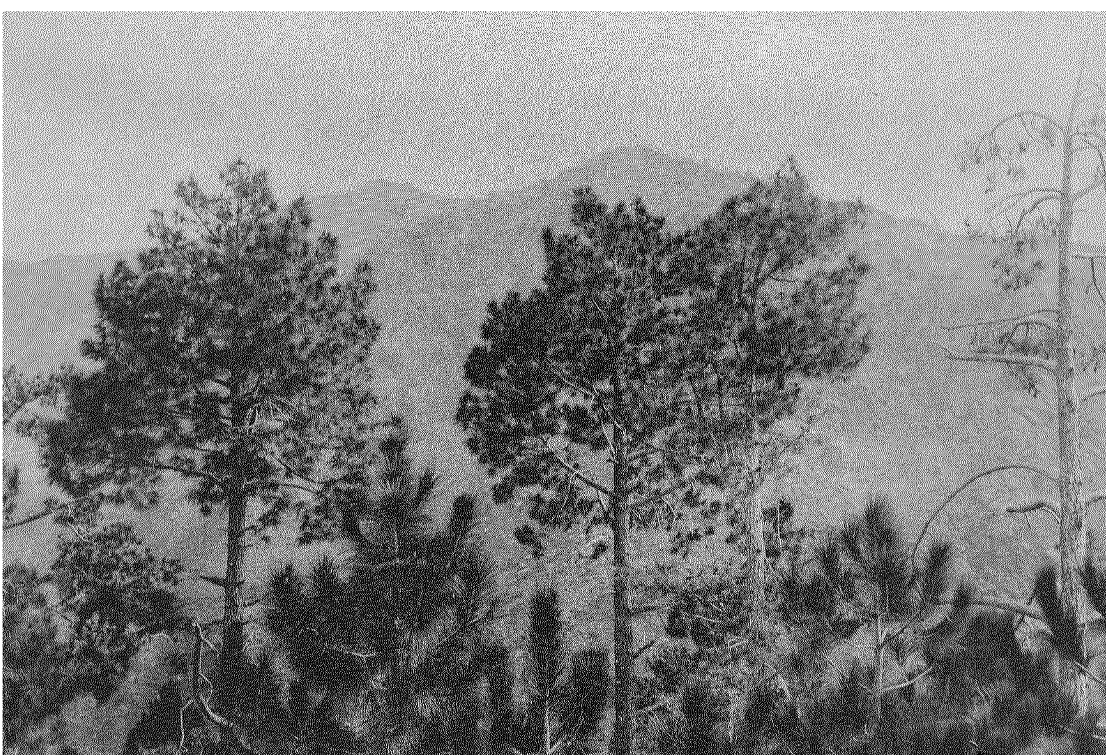
Lar spur.

But even the route of the Lar spur, by which we now continued to ascend northward from Miyagai-Kandau, could not in any sense be called difficult. The path first for a mile led steeply upwards over shoulders terraced for cultivation, and then turned north-east into the head of the Sheri-Darrah, which separates

VII. SOUTHERN SUMMIT OF MAHĀBAN SEEN FROM SHĀHKŌṬ



VIII. SUMMITS OF MAHĀBAN, SEEN FROM KANDRO-SAR.



the Lar spur from the main range. Another mile along well-wooded slopes and with a very easy gradient brought us up to Lar Chini, a fine spring which seems to offer the nearest permanent supply of water for the crest of Mahaban, at least on the southern side. Finally, after a quarter of a mile's ascent over a steeper, yet by no means trying, slope, I emerged on the crest line of the range near a tall and curiously shaped crag known as 'Ballighat' (" the tigress's mark "). From Miyagai onwards the path might with very little trouble be made practicable for laden ponies or mules, and it is probable that the same would hold good of the route lower down if the brow of the Lar spur were followed instead of the confined valley by its side.

Crest ridge of Mahaban.

The view which on the crest suddenly opened over the great valleys of Chamla, Buner and over the distant ranges of the Swat Kohistan, was magnificent notwithstanding the gathering rain clouds. But I confess the extent of this view did not appear to me at the time an adequate compensation for the disappointment which another observation almost equally rapid caused me. Of the *plateau* on the top of Mahaban, which the assumed identity of the mountain with Alexander's Aornos had made me (like others) look out for, in accordance with the plain indications of the classical historians, there was no trace to be seen anywhere. Yet from a point of the crest marked by the Ziarat of Qaim Baba, not far from the point where our path had first struck it, I was soon able to overlook the whole narrow ridge towards Shahkot, together with the slopes both north and south. Already the topographical appearance of the crest and of its southern slopes as it revealed itself from the Lar spur, had caused me misgivings in this respect. But there still remained the chance of the steep scarp of this southern face proving to be a kind of rim hiding some ground on the north side that might without exaggeration be called a plateau or basin. The view on the crest finally disposed of such hopes.

The ridge by which we proceeded, joined now by a Jirga of Amazai Maliks, towards Shahkot, proved along its whole length, circ. 1½ miles, remarkably narrow. In most places that what might be called level ground on the top was not more than 20 or 30 yards across, and along considerable stretches it was even less. Small terraces formed by bastion like rock projections on either side were distinctly few, and they, too, only showed a width of some 50—60 yards at the utmost. The ground on the north side sloped down from the ridge almost as steeply as on the south; owing, however, to the increased growth of vegetation—a common feature of the northern slopes throughout the Western Himalaya and Hindukush systems—the surface appeared here less rocky and broken. Nevertheless on this side, too, it would greatly tax the resources of modern engineering to secure anything like adequate level ground for buildings or roads such as, *e. g.*, a hill-station would need.

The Shahkot summit.

The elevation of the ridge we followed continued fairly uniform to near the foot of the *Shahkot* summit, where a small nullah draining into the Sheri-Darrah and a corresponding ravine on the opposite north face cause a slight dip (seen on the extreme left of fig. VIII). The ascent thence to the summit, circ. 300 feet above the nearest part of the ridge, was steep, but owing to the windings of the path in no way difficult; most of the ascent lay through relatively thick growth of ilex, while along the ridge firs and cedars prevailed, though nowhere close enough to form a forest. My eagerness to reach Shahkot was great; for on it were to be found the ruins of an ancient fort, which, judging from the fairly detailed account secured by Colonel Deane from native information, promised to be imposing and of distinct interest. The gathering of tribesmen which greeted us on reaching the top, was indeed imposing; for, in order to guard against a possible attack from the side of the 'Hindustanis' and any fanatical sympathizers, a 'Lashkar' of the Umarzai section of Mansur Gaduns probably close on four hundred men, had occupied this commanding height already early in the morning. But this very crowd of armed men helped only, as it were, to render still more conspicuous before my eyes the remarkably confined nature of the summit and the insignificance of its extant ruins.

The position and peculiar shape of the ruined fort is fully illustrated by the site plan (ii.) which I prepared with the assistance of Surveyor Lal Singh, and is accounted for by the configuration of the summit itself. This is formed by the convergence upon the main ridge, representing the axis of the range and having a general direction of north-west to south-east, of two narrow rocky ridges,—one coming from the north-north-east, and the other ascending from the south. The northern of these two ridges connects the summit of Shahkot with a peak almost equally high (7,320 feet by triangulation), distant circ. 4 miles to the north-east, while the southern one first leads to the Silosar summit, from which lower down the spurs of Utlai and Gabasanai bifurcate. At the intersection of these rocky ridges a series of narrow terraces is formed which face to the south-east, and have a longitudinal direction from south-west to north-east. It is along the sides of the small irregular area comprising these terraces that the scanty remains of old walls can be traced.

Ruined fort of Shahkot.

The area thus enclosed shows the form of an irregular pentagon with one of the angles receding owing to an indenture on the north-west face of the series of small terraces. The greatest length of the area is circ. 420 feet from south-west to north-east, while its width varies from circ. 200 feet along the south-west face of the pentagon to barely 80 feet near the centre. The highest of the terraces lies along the north-west face, and near the indenture just referred to rises a small mound, which may be partly artificial, to a height of circ. 20 feet above it. This is probably the point triangulated as the highest of the whole Mahaban Range. Near the south-western end of the same terrace is a heap of rough stones with a similar enclosure worshipped as a Ziarat. The four projecting angles of the little fort form bastions occupying the points where the four ridges previously mentioned diverge from the summit. With the exception of the ridge to the north-west by which we ascended, the rest of these ridges do not show a steep gradient, and, though rocky and narrow, can be ascended without much difficulty. The slopes between these ridges and below the enclosed area are distinctly steeper ; but even they are in no place unscaleable or as difficult as the scarps of Adh-i-Samudh towards the east or the face of Kafirkot towards the Indus.

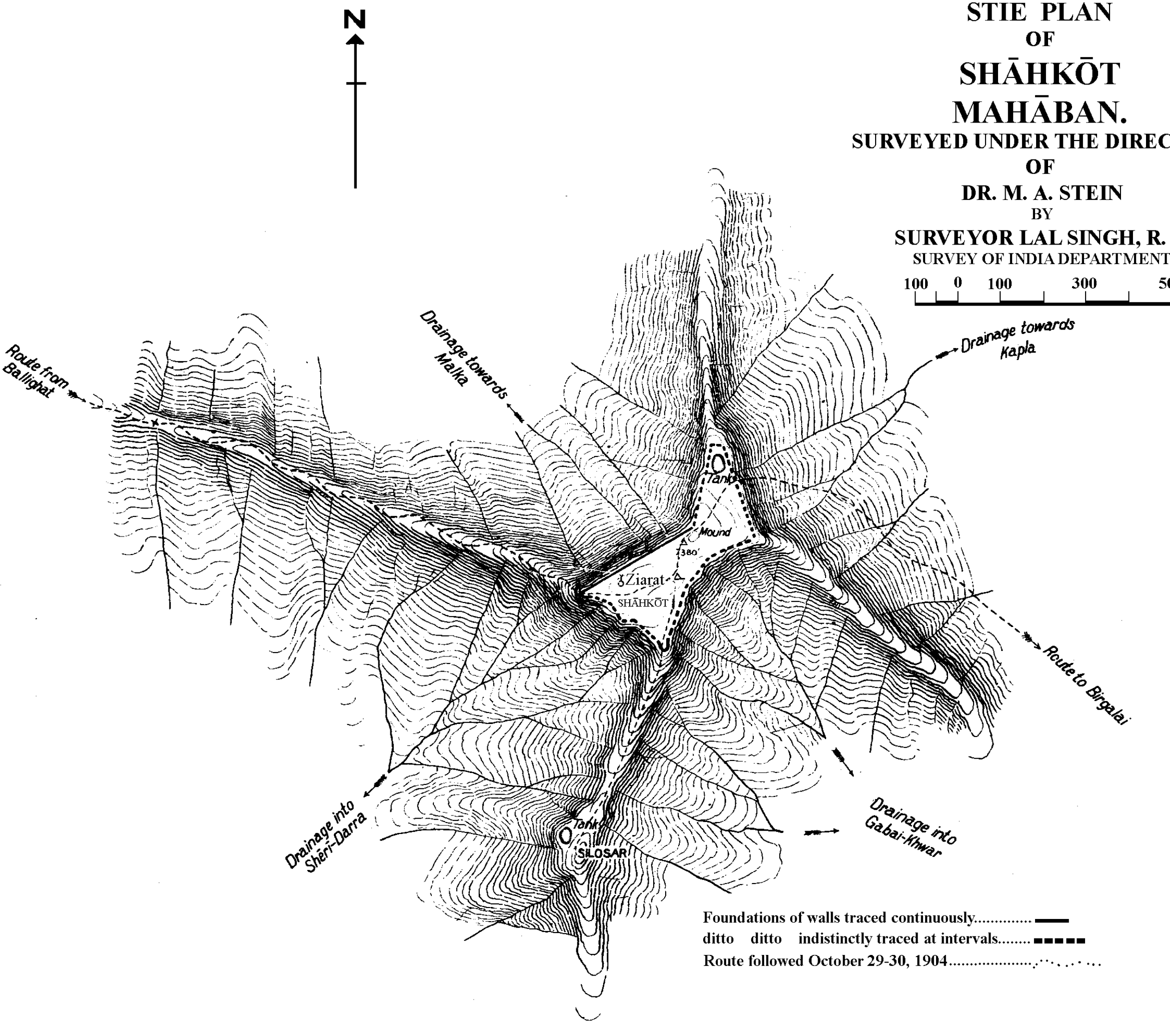
Walls of Shahkot.

The best preserved portion of the walls is the little towerlike bastion at the north angle which with a width of circ. 15 feet rises from 6 to 8 feet above the rocky top of the ridge it guards. The masonry is of the roughest, showing neither Gandhara construction nor uniform courses in its uncut or roughly hewn slabs. From this bastion the wall running along the north-west face up to the receding angle previously mentioned can be traced in an unbroken line of circ. 293 feet. For the greatest part of this distance it is just traceable above the ground ; nowhere does the exposed outer facing rise to more than two feet. The masonry consists of relatively small and roughly hewn slabs, arranged apparently in courses, but without much regularity. The slabs generally measure about one foot in length and 6—8 inches in height. Of the use of lime I saw no indication. The wall is certainly not the work of Pathan tribesmen as we know them now ; but, apart from this point, nothing can be safely asserted as to its age. My personal impression was against the extant remains belonging to a pre-Muhammadan period. The steepness of the slopes and the climatic conditions of Mahaban, with its relatively heavy fall of rain and snow, make it appear unlikely that walls of such poor construction could survive many centuries. Beyond that receding angle of the north-west face the line of the circumvallation can be made out only with difficulty and for short stretches. Without the indications furnished by the natural contour and the loose débris on the slope below the scanty traces of wall foundations could scarcely have been followed through the brushwood. The only clearly recognizable portion of the circumvallation met again is at the south angle, where a small bastion of the same type as at the west angle rises, but in a more decayed state.

The rocky slopes outside the fortified line showed nowhere any débris that might point to the existence of earlier and more massive defences. Nor did I come upon any traces of more solid structures inside the wall. Among the little heaps of stone débris which covered the narrow terraces here and there,

STIE PLAN
OF
SHĀHKŌT
MAHĀBAN.

SURVEYED UNDER THE DIRECTION
OF
DR. M. A. STEIN
BY
SURVEYOR LAL SINGH, R. S.
SURVEY OF INDIA DEPARTMENT



Foundations of walls traced continuously.............
ditto ditto indistinctly traced at intervals........
Route followed October 29-30, 1904....................

no carved fragment nor even a properly cut slab could be distinguished. Walls of the roughest construction erected within the northern end of the fort serve to dam up a pool of water, which, however, was unfit for drinking. It is used for the cattle of the Gujars grazing on the mountain during the summer months.

The confined nature of the ground within Shahkot was forcibly brought home to me by the conditions of our stay there. The hope of finding more extensive remains and the necessity of securing adequate time for survey work had made me insist beforehand upon arrangements which would allow me to spend at least one full day and night on the summit of Mahaban, though the Khans and Maliks did not like the prospect of camping on such exposed ground. Shahkot offered certainly the most convenient site for the purpose; yet the portion of the Umarzai Gadun Lashkar which was to remain with us and the gathering of Maliks with their personal followers, amounting altogether to between three and four hundred men, sufficed to crowd uncomfortably every bit of tolerably level ground on the summit. The supply of water to this gathering clamorous for the day's meal proved no small difficulty. Though two springs were also mentioned as existing some distance below on the northern and south-eastern slopes, I greatly doubt whether any of them are nearer than the Lar Chini spring, from which water was at last brought for us at nightfall. Thus the abundance of springs, which in cherished accord with the descriptions of Aornos was supposed to exist on or quite close to the summit, was likewise not borne out by reality. Camp on Shahkot.

The impressions of that night's camp on Shahkot (October 29-30th) are not likely to be soon forgotten by any of those who shared it. The rain, which had visited us in showers during the afternoon, descended heavily after midnight, and turned before daybreak into a steady fall of snow. This was, indeed, so early in the autumn, an unexpected experience, and necessarily a serious trial for the tribesmen, who in their airy cotton clothes as worn in the lower hills and without shelter had already been soaked by the night's rain. I woke up before daybreak to find my little Kabul tent densely packed with Gaduns, who had been wise enough to seek its shelter, and soon afterwards learned that the Lashkar had availed itself of the first glimmer of light for retreating from our inhospitable height. As the snow continued to fall until it covered the ground half a foot deep one after the other of the Maliks hurried to depart after explaining their inability to prevent their followers' flight. We were strongly urged to follow their example; but it was impossible for me to fall in with this advice, since the rain and the crowd of the preceding afternoon had effectively prevented my survey work from being completed. Fortunately it was easy to meet the arguments about the risk of being left practically unprotected by pointing out that such inclement weather as had sufficed to scatter our tribal host was likely to keep also Hindustani fanatics and the like from the snow-covered summit. Our friends the Khans of Topi and Jhanda, however, held by us together with such personal followers as they had brought with them, and so did two pensioned Native officers among the Mansur Gadun headmen.

In the course of the morning the snow stopped falling, and when before midday the sun broke through I was rewarded by a view quite dazzling in its extent and clearness. The panorama extended from the Safed-Koh to the high snowy ranges along the Kunar Valley and those which separate Chitral from the Swat Kohistan. Up the valley of the Indus a series of mighty peaks were seen towering towards Yasin and Gilgit, including, I thought, even Rakiposhi, while eastwards many of the Kashmir ranges with the long snowy line of the Pir Pantsal lay clearly visible. Nearer I could distinguish through my glasses most of the old sites I had surveyed in Buner during the short campaign of 1898. Thus Mahaban, however much its antiquarian glory seemed likely to fade now, proudly vindicated its claim to command one of the grandest views on the north-west frontier. View from Shahkot.

After completing the survey of the Shahkot remains as well as a round of phototheodolite views I proceeded with Surveyor Lal Singh to a prominent knoll on the main ridge beyond Ballighat, which was needed as an Silosar summit.

additional 'hill-station' for completing the plane table survey of the southern slopes of the range. When I returned to Shahkot after this rapid excursion over steep scrub-covered ground the afternoon was too far advanced to permit of the intended visit to the *Silosar* summit. Mr. Pipon, however, had found time to visit it earlier in the day, and to him I owe the assurance that, apart from the little flat shoulder on the west holding a small tank which is visible in photograph, fig. VII., this summit, too, offers no level ground. On the top of Silosar, which is nothing but a narrow rocky ridge, Mr. Pipon noted the remains of walls just rising above the ground and forming apparently a square of some 20 feet. Below this there were traces of a walled-up terrace of similarly modest dimensions.

Descent to Birgalai.

My route of descent led over the continuation of the main range to the south-east, and brought me by nightfall into the open and well cultivated valley of Birgalai. This marks a distinct gap in the range, and over the pass at its head, circ. 5,000 feet above sea level, leads the easiest route between Gadun territory and the valleys held by the Nawab of Amb.* The first portion of the descent to Birgalai village passed along well wooded and relatively easy slopes to an elevation circ. 1,000 feet below Shahkot; then followed a succession of more or less natural terraces partly occupied by fields, and finally towards Birgalai village steeper slopes clothed partly with splendid cedars. The route is certainly less easy than the one of Utlai or Gabasanai, but it would require a strong imagination to describe Mahaban as particularly difficult of access from this side either.

SECTION vi.—THE ALLEGED SITE OF AORNOS.

Supposed identity of Mahaban with Aornos.

My observations about the topography of the Mahaban Range, and in particular its crest and chief summit, had to be recorded in some detail in view of the antiquarian and historical interest attaching to the question of its identity with Alexander's *Aornos.* This identification from the time when it was first proposed, more than half a century ago, has rested solely on the agreement which General Abbott believed he could trace between the classical descriptions of the site of Aornos and such topographical features of Mahaban as he was able to observe from a distance or to gather from native information. The details given above will make it easy for any critical student to compare for himself the picture of Mahaban as it presented itself to General Abbott with the facts observed on the spot. Before, however, drawing attention to the differences which such a comparison reveals, it is necessary to note at least the main points as to the position and natural features of Aornos as the extant classical accounts present them.

Vagueness of classical data.

The task of indicating these points within the limits permissible for this report is greatly facilitated by the recent publication of Mr. VINCENT SMITH's highly valuable '*Early History of India,*' which furnishes a lucid review and analysis of the data available in the works of Arrian, Diodorus and Curtius concerning Alexander's operations against Aornos. This may be recommended for convenient reference as to all details of the recorded story.† The authors agree in representing "the Rock of Aornos" as an exceptionally strong mountain fastness which Alexander was tempted to attack owing to "a legend that the demigod, Heracles, whom he claimed as an ancestor, had been baffled by the defences." The topographical data given as to Alexander's previous operations in the mountains north of the Kabul River Valley are so vague that of Massaga, Ora, Bazira—towns which Alexander captured before proceeding to the attack of Aornos—it is impossible safely to assert more than that they were situated somewhere between the Panjkora and the Indus.

*In the latest published edition of the "Northern Trans-Frontier sheets showing Mahaban, Birgalai village and the important pass to which the latter gives its name are marked, no doubt from native information. as being to the south of the peak triangulated with a height of 5950 feet. In reality the village and pass lie just to the *north-west* of this fine peak known as Parchangan.

† Compare V. Smith *The Early History of India,* pp. 49-51. For translations of the texts from which extracts are quoted below, see M'Crindle *The Invasion of India,* pp. 73 *sqq.*, 197 *sqq.*, 271 *sq.*

As to the geographical position of Aornos itself, the only definite indication to be gathered from all our texts is that it lay to the west of the Indus. Diodorus and Curtius speak of the foot of the mountain as being washed by the Indus, and their statement is supported by a passage of Strabo. Arrian, whose account is otherwise the fullest, does not mention this, but makes Alexander proceed against Aornos after reducing certain towns situated near the Indus, probably within the Peshawar District. Arrian also tells us that Alexander made "Embolima, a city close adjoining Aornos," his base of operations, but he in no way indicates its position. General Abbott proposed to recognize Embolima in the present Amb on the Indus, mainly on the ground of the apparent similarity between the name Embolima and the modern name Amb *if coupled* with that of a neighbouring spur which is said to be *Balimah.** But it must be owned that this assumed double-barrelled name is certainly unknown to present use, and even the application of the second part doubtful. The risk in connecting modern local names with ancient ones of uncertain position, where no historical links are available, does not require to be specially explained to critical students.

Description of Aornos.

Aornos itself is uniformly described as a mighty rock fastness, rugged and inaccessible by nature on all sides. Our authorities agree in representing ascent to its summit as possible only by a single path, which, if we trust Arrian, was "cut by the hand of man, yet difficult." The same author mentions that the rock was "said to have had a circuit of about 200 stadia (23 miles), and at its lowest elevation a height of eleven stadia (or circ. 6,700 feet)," while the estimate of Diodorus is 100 and 16 stadia, respectively. The latter distinctly states that the Rock on its summit "had a level surface forming a complete circle." That Arrian and his authorities also assumed the summit of the 'Rock' to have formed a plateau is clear from his description. On the summit of the Rock there was, it is also said, "plenty of pure water which gushed out from a copious spring. There was timber besides, and as much good arable land as required for its cultivation the labour of a thousand men."

Seige of Aornos.

Some topographical indications as to the immediate surroundings of the rock are supplied by the accounts of the operations by which Alexander succeeded in capturing it. These accounts agree in the main lines, Arrian's narrative being the most detailed and explicit. We learn from the latter that Alexander first marched for two days from Embolima towards the Rock. He then sent an advanced force under Ptolemy to occupy a hill top facing the most assailable part of the Rock.

This was gained under local guides "by a route which proved rough and otherwise difficult to traverse;" we are nowhere told in which direction it lay from the Rock. After two days' fighting with the opposing Indians Alexander succeeded with the main force in joining Ptolemy by the same route. The position occupied was divided from the Rock by a great ravine. In order to overcome this obstacle Alexander directed a great mound to be formed of piled-up stakes, "whence, he thought, it would be possible for arrows and for missiles shot from engines to reach the defenders." By the first day's work the mound was extended for the length of a stadium. "The work of piling it up thus went on for three days, without intermission, when on the fourth day a few Macedonians forced their way to a small hill which was on a level with the Rock, and occupied its crest." When this position had been connected with the mound the defenders lost heart, and finally fled from the fastness during the night, losing heavily on their descent both from the Macedonians who had "scaled the Rock at the point abandoned by the enemy" and from falling over precipices. The accounts of Diodorus and Curtius agree in all essential points with Arrian's description, except that both make the stronghold fall seven days from the commencement of the mound. The operations undertaken immediately after the capture of Aornos are narrated in too vague and varying a fashion to throw any light on the position of the stronghold; the only certain fact seems that they ultimately brought Alexander to the right bank of the Indus.

* See *Gradus ad Aornos J. A. S. B.*, 1854, pp. 344. General Abbot translates 'Balimah' as "the windy." His attitude in matters of etymology and ancient local nomenclature is sufficiently characterized by the opinion that 'Aonj' (a local name in reality known only as *Banj,* see below) *is* "a name convertable to Aornos," *ib.* p. 338; that the river Barindu in Buner may derive its name from Greek *bremo* ('to murmur'), *ib.*, p. 361; by the equation of 'Eusufsyes' (Yusufzais) with Alexander's Aspasioi, p. 339, and a host of similar guesses devoid of all critical foundation.

Natural features of Aornos not found on Mahaban.

It will be seen from the above analysis that the classical accounts of Aornos, though they fail to supply us with any definite information as to the position of the stronghold, yet furnish certain plain and relatively precise indications as to the natural features of the Rock and its immediate surroundings. Nowhere did my survey of the main range of Mahaban and of the spurs leading up to it reveal to me ground to which the description in our available texts could be held applicable by an observer trained in critical methods. This statement applies with particular force to the main summit of Mahaban and the ridges culminating on it where General Abbott's theory had located Aornos.

It does not appear to me necessary in this place to examine in detail the topographical assumptions on which that theory was based by its author. The discrepancies between these assumptions and the facts revealed by the actual survey are too great to escape any reader who will take the trouble to compare General Abbott's description of Mahaban in his 'Gradus ad Aornon' with the observations recorded above. It will suffice to point out that to him Mahaban presented itself as a mountain table forming a plain about 5 miles long at the summit; that he believed this summit to be ground fit for the action of cavalry, and that he declared it "difficult to offer a more faithful description of the Mahabunn" than Arrian's account of Aornos. It is only fair to add that the inaccuracy of the picture thus presented is largely accounted for and excused by the total want at the time when General Abbott first formed his views about Aornos (1848) of even an approximate survey of Mahaban and the surrounding regions.* The value of his personal observations was necessarily impaired by the fact that they were made from a considerable distance, and then only from the side of Hazara. Nor can it surprise us that the information he gathered from native sources has proved in many respects wholly misleading.

General Abbot's conjectured site of Aornos.

Only in respect of two points does special notice of General Abbott's suggestions still seem needful. He appears to have completely failed to realize the topographical bearing of the reference which all texts clearly make to the great ravine that separated Ptolemy's position from the Rock. By an interpretation which is not warranted either by Arrian's text or the accounts of the other historians, he turns Alexander's great mound built for crossing this ravine into "a trench of approach with a parapet." In consequence of this misapprehension the fact of the summit rigdes of Mahaban showing nowhere such a ravine has completely escaped his attention. Yet it was on the northern of these ridges, the most conspicuous from the Hazara side, that he was inclined to look for the particular site of the Rock.† The point of this conjectural location, as far as I can make it out from the profile sketch attached to the paper, appears to have been a small knoll on the narrow ridge connecting Shahkot with the triangulated peak (7,320 feet) northward. Owing to its distance from Shahkot (circ. 2½ miles) and its situation beyond Gadun territory I was unable to proceed to it. But the views obtained from our survey stations both near Ballighat and on Parachangan showed quite clearly that this insignificant knoll on a depressed part of the ridge would be a most unlikely site for any fortification. It is completely commanded by a crest rising to the southward: and its available level space is so restricted that compared with it the little fort of Shahkot would appear quite a large place. Of the castle which was vaguely reported to General Abbott as occupying this spot, I could hear nothing.

I hope the above remarks will suffice to explain the considerations which render it impossible to me to share any longer the belief in the probability of the conjecture which located Aornos on Mahaban. I am not prepared at present to suggest in its place any other identification, and I am inclined to doubt whether the time has come as yet for attempting a final solution. Considering how vague the geographical data are which our available sources furnish, and how little we know as yet about the detailed topography of the mountain tracts which lie along the Indus towards Buner and Swat, there still remains a possibility of our having to look for Aornos higher up the great river. It is possible that even after those regions have been surveyed and opened to the antiquarian student, the question as to the site of Aornos will remain as obscure as

*See in illustration of this the curious "Sketch of Sohaut, Boonair, Chumla" added to the paper.

† See *J. A. S. B., 1854, p. 343.*

it is now. In that case doubts which even now suggest themselves as to the truly historical character of this and, perhaps, other episodes in the story of Alexander's Indian campaign, would acquire fresh strength. Possibly this result would not be pure loss to historical research. We know well the wonderful growth which the 'Alexander legend' has attained in the later classical period. Would it not be of interest to possess definite quasi-topographical evidence that its roots reached back to the early epoch when the sources used by Arrian were still in course of formation?

Absence of local traditions.

I cannot leave the subject of the Mahaban Range without putting on record two negative observations which may be of interest to future enquirers. There are at present among the tribes settled on the slopes of Mahaban no historical traditions of any kind attaching to the crest of the range or to the ruins of Shahkot. This total absence of local traditions made it somewhat difficult to explain to our Gadun hosts the particular importance which a thorough examination of the main ridges and summits had for me. It was, perhaps, on this account that Mr. Pipon who throughout the tour kindly charged himself with the task of keeping Khans and Jirgas in good humour by genial talk while I was busy with surveying and other absorbing work, thought it expedient to tell them while on Shahkot of the great exploit which 'Sikandar Padshah' was believed to have effected there. I do not know whether his interlocutors were much impressed by the intelligence that the legendary hero had troubled himself about the capture of the barren rocky ridge with its insignificant fort. But I should not feel surprised if the story thus told by a 'Sahib' of authority, and on such a memorable occasion, would take root and after a time assume all the semblance of genuine tradition. Since plentiful experience has shown me the ease with which quasi-learned legends of this sort can be inoculated on Indian soil, I have thought it necessary to record here a warning as to the artificial origin of this possible future addition to local lore.*

Search for inscribed stones.

The other observation to be noted is that, notwithstanding repeated enquiries and the undoubted *empressement* with which all tribal communities endeavoured to facilitate my search for ancient remains, I did not trace, or even hear of, a single inscribed stone *in situ* among any of the ruins visited on the Mahaban Range and its spurs southwards. Yet a considerable number of the inscriptions, almost all "in unknown characters," which had been brought to Colonel Deane between the years 1894—1897, and had subsequently been published by M. Senart and myself, was declared to have been found at localities situated on the southern slopes of Mahaban or on the range itself.† My experience had been exactly the same on the occasion of my tour in Buner, whence another large class of such finds was said to have come; but considering the far more favourable conditions which my later tour offered for such enquiries, their negative result here acquired, I think, additional significance. The only "inscription" I saw or heard of during my Mahaban tour was a rough slatey stone covered with "unknown characters" which by the freshness of their execution and still more by their queer look recalling transmogrified English capitals, proved an unmistakable and clumsy forgery. It was in the hands of a trader at Gandap, who declared to have received it some years ago from a Mullah, but could or would tell nothing more of its origin. A similar 'antique' had been shown to me a short time earlier by a well known coin-dealer of Rawalpindi who had received it from the Peshawar District.

Section vii.—Dewai and the ruins of Mount Banj.

Fort Dewal.

On reaching Birgalai village, on the evening of October 31st, after the descent from Shahkot, the welcome intelligence awaited me that the Nawab of Amb had unexpectedly invited us to pay a visit to his newly built fort of Dewai before entering the tract of the Salar Gaduns. I was very glad for this

*I may mention here as an amusing instance the now widely spread "tradition" which turns this Stupa of Manikyala into a monument erected by Alexander over the grave of his charger Bukephalos. Started originally, no doubt, by some 'Sahib' possessed of antiquarian taste and imagination and propogated by the half-educated, it has now firmly taken route among the people in the neighboring tracts of the Punjab.

† Compare regarding epigraphic finds of this kind, classed into a 'Mahaban' group,' Senart *Notes d'Epigraphie indienne*, v., pp. 8 *sqq.*, 16 *sqq.;* also my *Notes on new inscriptions discovered by Major Deane, J. A. S. B.*, 1898, pp. 5 *sqq.*, 10.

détour, as it would enable us to get good views of portions of Amb territory east of Mahaban, which had never been visited by Europeans. Accordingly early next morning I ascended Parachangan, a prominent peak to the south-east of Birgalai (triangulated height 5,950 feet), which proved an excellent survey station. Then a march of circ. 3 miles to the south-east, along the well-wooded crest of a spur which may be considered as the true continuation of the main Mahaban Range towards the Indus, brought us face to face with the Nawab's fort. It proved to occupy a remarkably strong position on a large table-like hill top, which is separated by great dips from the adjoining portions of the spur, and shows still greater declivities towards adjoining ravines on the north and south. In photograph, fig. x, it is seen from the north-west.

Ancient remains at Dewai.

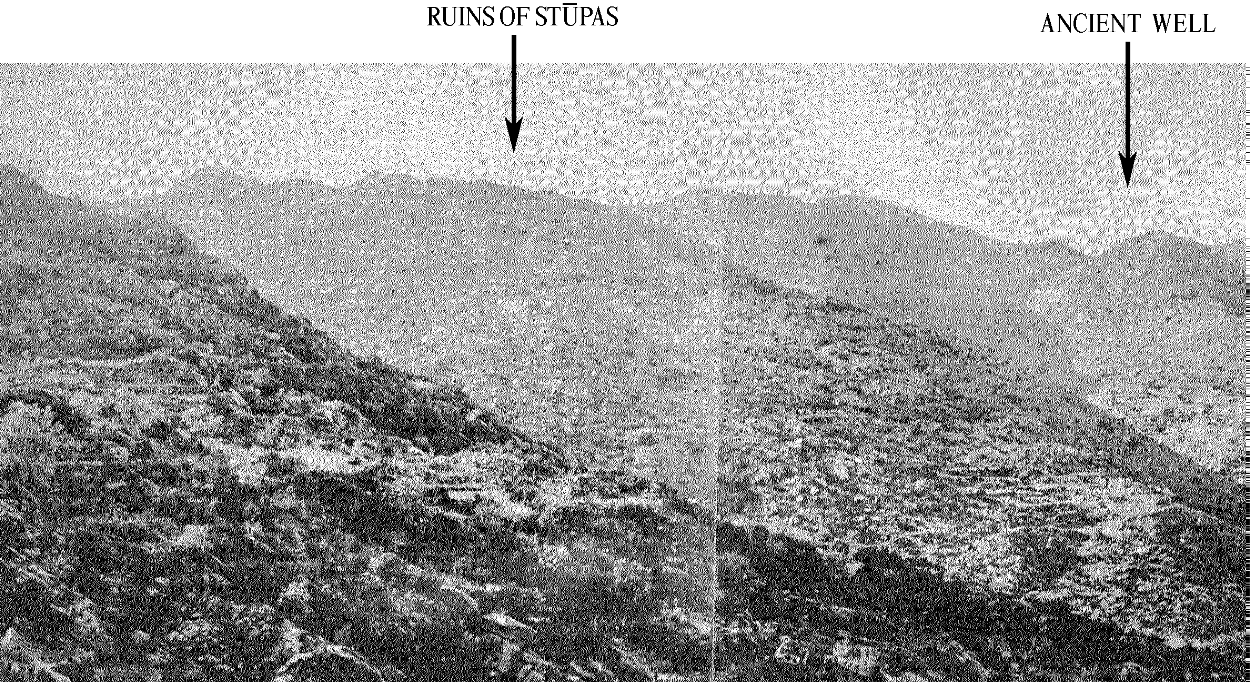
After passing the small Killa of Chirbattai, which guards the pass at the north-west foot of the hill, and while ascending the steep slope of the latter, I soon came upon plentiful marks of early occupation. A series of small terraces along the path, built of ancient masonry of the Gandhara type, seem to have served as bases for towers or small dwelling houses. The remains of their superstructures may have partly been utilized in building the large new fort on the top for which such solid materials close at hand were naturally very convenient. Several more 'Dheris' of this kind still covered with shapeless débris heaps could be seen along a spur which juts out westwards from the hill face we ascended. Among the terraced fields which cover the easier slopes near the top of the hills traces of ancient structures seem to be frequently met with. There were reasons against any detailed survey in the immediate vicinity of the fort to which we had been hospitably invited; nor would the available time have sufficed for a careful examination. Plenty of ancient slabs of large size were found immured in the foundations of the stronghold. The latter had been rapidly built some three years ago, when a Lashkar of the Nawab occupying this commanding height faced for a long time the Gadun levies assembled at Gabai, a village westwards.

During the construction of the fort workmen collecting stones found a small statue on the boulder-strewn slope about a hundred feet below the north-east corner. I had previously heard of this 'idol' but did not succeed in eliciting anything as to its character or what had become of it. Nor were the levies forming the relatively strong garrison able or willing to vouchsafe information as to the remains of an older stronghold which popular report asserted had been pulled down when erecting the new fort. An old copper coin which was quasi-secretly presented to me after leaving, and which had been picked up in a field near the fort, belongs to an issue of the Later Kushans. The name *Dewai* (from Skr. *Devi*) seems also a trace of ancient occupation, and the site deserves to be kept in view by future enquirers. The commanding position of the hill must at all times have assured its importance. Splendid views opened up the Indus Valley, beyond the great bend of which the towering snowy range above Tangir and Darel could be clearly recognized as well as further east the high peaks of Kaghan. There is at present no spring or other natural water supply on the top of the hill, the garrison having to rely on water stored in large iron tanks which strangely contrasted with the otherwise truly mediæval surroundings.

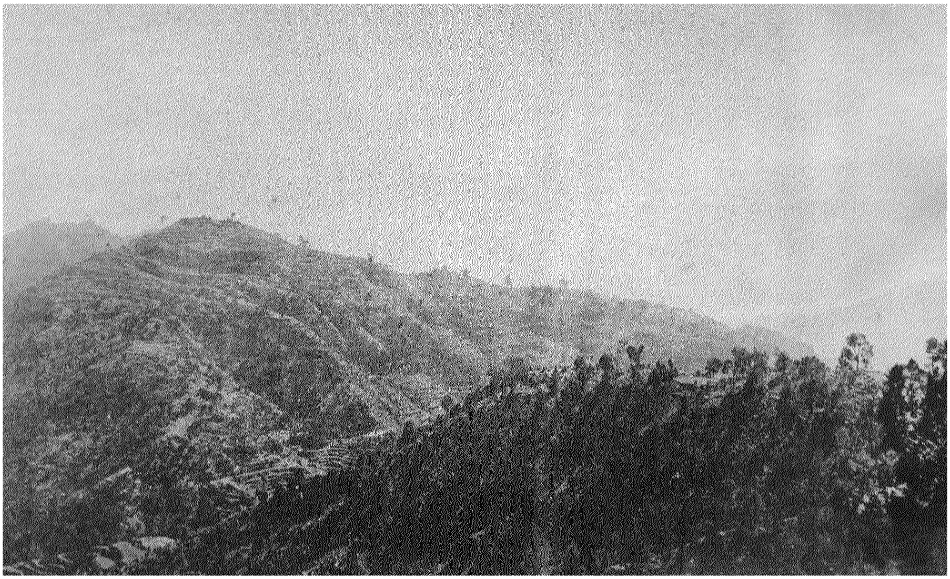
March to Mangalchai.

From Dewai, for which the clinometer recorded an elevation of 5,025 feet, we had a long and fairly tiring march to Mangalchai, a large village of the Salar Gaduns, where our camp had been arranged for the night. A very steep descent of over 2,000 feet southwards brought us to the bottom of the Gabai Khwar, a narrow valley which descends from the summit of Mahaban between the spurs of Birgalai and Gabasanai and opens upon the Indus near Sitana. Thence our route ascended due south over the pass known as Serai Kandau to a series of small, but relatively open and fertile, plateaus nestling among the ridges into which the Gabasanai spur divides here. These plateaus are well irrigated by springs, which form the head waters of the Brag Khwar draining south-eastwards into the Indus; they are occupied by the fields of Chanai, a considerable settlement of Akhun Khels, and of Mangalchai, one of the largest villages of the Salar Gaduns. It was long after nightfall that the salutes fired by the escorts which sub-sections of the latter had posted along the route, greeted us on our approach to Mangalchai.

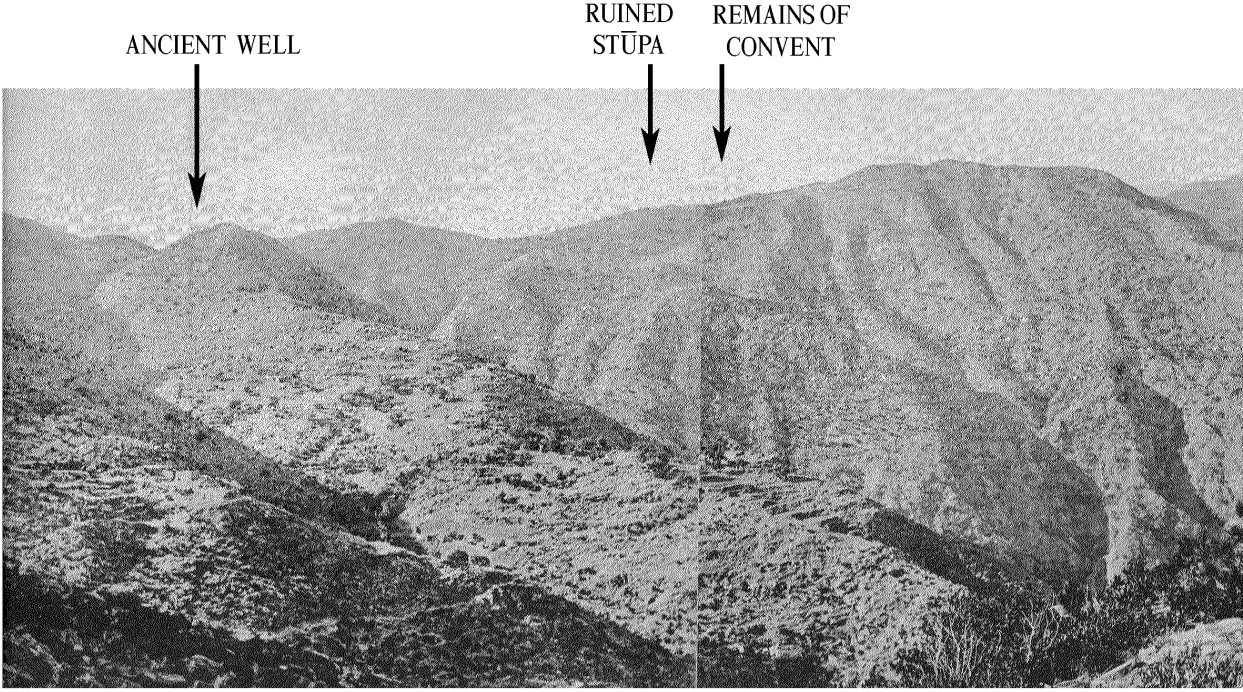
IX. PANORAMIC VIEW OF THE BANJ SITE (left)



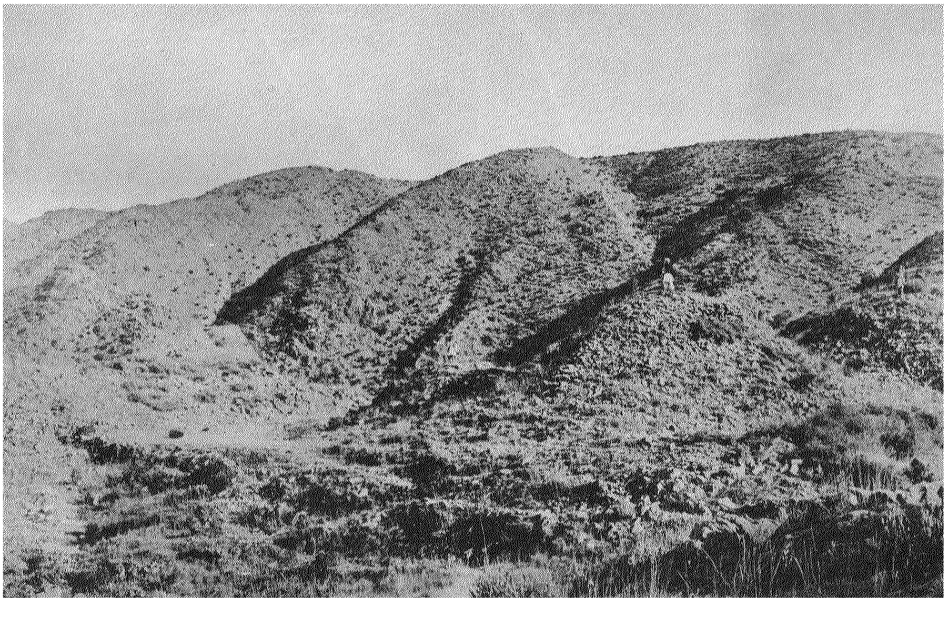
X. FORT DĒWAI



IX. PANORAMIC VIEW OF THE BANJ SITE (right).



XI. RUINED STŪPAS



Mount Banj.

This village has been chosen for our camp as the nearest point offering shelter and supplies on the route to Mount Banj. I had from the first been anxious to reach the latter as reports extremely vague as to details, but widely spread and already noted in Colonel DEANE's very valuable paper "Gandhara and Udyana," credited this conspicuous peak with being the site of ancient ruins. The still more widely held belief as to its inaccessibility had made the worthy Khans concerned in the arrangements look with ill-disguised dismay at this extension of my programme. But the objections raised on this score all the more failed in impressing me, since the 'Mirza' of one of them privately confided to me that he had been engaged some years previously in removing from Banj 'Buts,' *i. e.* Buddhist sculptures, for presentation to 'Sahibs.' Apart from the instance of Dewai already mentioned, no finds of this kind had been heard of on the southern and eastern slopes of Mahaban anywhere else but at Banj ; the latter was also known to me as the alleged find-place of a short Kharoshthi inscription brought to Colonel DEANE and published by M. SENART, about the genuineness of which there could be no possible doubt.*

Topography of Mount Banj.

The route followed from Mangalchai on the morning of November 1st, first ascended the spur which divides the Brag Khwar drainage from the far more open valley of the Palau stream westwards, and then continued winding along its rocky and bare crest to the south for a total distance of circ. 4 miles. Barren and steep as the slopes are which descend on either side, cultivated terraces were met with here and there from the point where a large side spur separates to the east running down to the Indus. This side spur at its root has an elevation of probably over 4,000 feet, and maintains its height for a considerable distance eastwards. About two miles to the south of this point the main spur culminates in a craggy height, marked by several rock-pinnacles and shown on the map as *Mount Banj*, with a triangulated height of 4,450 feet. From it there descends to the east-south-east a second side spur which strikes the Indus just above the large Utmanzai village of Khabal. It presents an almost wall-like face to the south as seen from the Indus Valley, and its crest, which within a distance of little over two miles on the map shows a fall of not less than 3,200 feet, has all the appearance of exceptionally difficult ground.

Between this side-spur and the previously mentioned one, which runs almost parallel to it on the north, there lies enclosed a valley about two miles broad from crest to crest and drained by the stream of Khabal. In its lower portion this valley is nothing but a deep-cut narrow ravine between precipitous rocky slopes rising up from the boulder-filled bed of the stream. But at its head the enclosing slopes are somewhat easier and form a kind of mountain amphitheatre. The panoramic view reproduced in fig. IX. shows a great portion of this amphitheatre as seen from a point to the south (marked *N.* on the site plan) some 700 feet below the top of Banj Peak. On the shoulders of the ridges which descend into this amphitheatre from Banj Peak, lie the huts of Banj hamlet as well as the ruins of the ancient site I was in search of. The huts, some twelve or fifteen in number, are occupied by Gujars holding their land from Utmanzai Maliks at Khabal.

Ancient well, Banj.

Most of the huts lie in the little ravine which is seen in fig. IX., and into which I descended by an easy path from a dip in the main spur above. At the bottom of this ravine, at the point marked by an arrow in fig. IX., I came upon the first mark of early occupation in the form of an ancient well, 3 feet square, built of large roughly cut slabs with columns of small flat pieces in the interstices. It still is the main source of water supply for the hamlet. One of the slabs placed around the mouth measured 6 feet by 1½ feet with a thickness of 8 inches. The total depth of the well proved 21 feet with the water standing at the time of my visit to within 10 feet from the mouth.

Northern ruins, Banj site.

Ascending the ridge to the north-east of this well for a distance of about 250 yards I found on a fairly level shoulder the much-decayed remains of some ancient building (marked *B* in plan iii.) which had been

* See Senart *Notes d'Epigraphie indienne*, v. p. 36 *sqq.*

utilized for the construction of a series of cattle-sheds. The addition of modern rubble built walls made it difficult within the short available time to determine the dimensions and shape of the original structure. The low débris mound formed by it measured circ. 27 feet square on the top, and on its south face the ancient masonry of a base or lower floor could be traced for upwards of 40 feet. Passing through a cattle-shed, which was built with old stone materials against the south-east corner of the mound, I was shown a small vaulted chamber 9 feet 9 inches deep and 6 feet 9 inches broad, with a height of 5 feet 6 inches from the present ground level to the top of the vaulting (see detailed plan and elevation in iv.). The semi-circular vault springs from a small projecting cornice, 4 inches high, of the longer side walls, and is constructed of narrow overlapping courses, with flat closing stones, circ. 1½ feet broad, on the top. The walls of the little chamber show well finished masonry of the Gandhara type.

Ruined mound *A*. About 50 yards to the east of ruin *B* and on the same small plateau rises a rectangular mound to a height of circ. 10½ feet above the level of the surrounding field (shown as *A* in site plan). It appears to be formed at its base by two receding masonry-faced terraces, of which the upper one measured about 28 feet on the north and south faces and circ. 21 on the east and west. Recent digging at the north-west corner showed the height of the extant masonry to be about 2½ feet. This masonry showed regular courses of roughly dressed slabs from 6 to 8 inches in height, alternating with equally regular, but narrower, courses 2 inches high. The dimensions of the lower terrace, of which only the outlines could be traced in rows of fallen slabs jutting out above the level of the field, were approximately 60 by 52 feet. The whole structure strongly suggested the base of a small stupa, of which the débris of uncut stones covering the top and slopes of the mound may well represent the remains.

Ruined building *C*. About 30 yards to the north-east of this mound the remains of massive walls belonging to a large building, *C*, can be traced close up to the eastern edge of the plateau. Owing to the huts of a little farm which have been built into and over these ruins, and partly with their materials, the original dimensions could not be clearly ascertained by the Assistant whom from want of time I was obliged to entrust with the detailed survey of this northern group of ruins. The relatively large size of this building is, however, clearly indicated by a well-preserved flight of foundation walls extending for a length of over 70 feet, and still rising circ. 3 feet above the ground. These walls are 4 feet thick, and show partly dressed slabs from 2 to 3 feet long and 8 to 10 inches high, with the usual packing of small flat stones in the lateral interstices. Much material from this ruin seems to have been utilized for buttressing the terraces which have been constructed for purposes of cultivation on the eastern and southern slopes of the shoulder. Judging from its size and position, which recalls that of many a Buddhist convent within the limits of Gandhara and Udyana, it appeared to me highly probable that we must recognize in this ruined building the remains of a Sangharama or monastery.

Ancient pathway. I was unable to give time to a careful examination of other ruined terraces and foundation walls near *C* since the report of a larger group of ruins called me southwards. Crossing the ravine containing the well and ascending the slope opposite to the ruins just described, I soon reached a path which in its partial paving of large slabs bore a clear indication of antiquity. At a distance of circ. ¼ mile this path passes below a massive terrace of ancient masonry measuring circ. 50 by 24 feet, built against the hill slope *(D)*. About 140 yards further up it leads in a ravine to a fine spring which is said to be permanent and which by itself would account for the early occupation of a spot otherwise so little attractive. Just above the spring there are the remains of ancient walls, 4 feet thick, supporting a terrace circ. 20 feet square. The path then turns to the south-east and ascending with an easy gradient another small ridge for about four hundred yards, reaches a small plateau nestling by the side of a steep rocky ridge which runs down from Banj Peak in a north-easterly direction. The group of ruined structures which crowd this little shoulder (see panoramic view, IX., in the

foreground) sufficed to dispel all doubt as to the religious importance of the site. The relative position and distribution of these structures will be best realized by referring to the Sketch Plan of the southern group of ruins (Pl. iv).

Southern ruins of Banj site.

Though the remains of this group had not like former been utilized for sheltering modern dwellings it was clear at the first look that they had undergone almost equally great destruction. The digging for sculptures which had gone on here for long years, and to which reference will be made below, was, no doubt, responsible for most of the damage. But fortunately it had not succeeded in effacing altogether the outlines of the architectural ground-plan. In the relatively best preserved structure, *F*, at the north-west edge of the shoulder, it was easy to recognize the remains of a circular chapel or Vihara exactly similar to those seen by me near the ruined monasteries of Guniyar and Charkotlai in Swat and near the Gumbatai Stupa in Buner.*

Ruined chapel.

Its walls, circ. 2 feet in thickness and solidly built of large slabs, still rose to a height of 4—5 feet above the ground for a great part of the circumference. The interior largely filled with the débris from the dome which once had surmounted it, showed a diameter of close on 15 feet. The entrance had apparently faced eastwards, but could not be accurately placed owing to the wholly broken condition of the wall on this side. The chapel occupied the centre of a base 27 feet square, the masonry facing of which indicated an approximate height of 8 feet. This base again rose on a terrace showing supporting walls circ. 45 feet long on the north and west sides where it was built out beyond the natural slope. About 15 feet to the west of this terrace I could trace the remains of what seems to have been a small Stupa *(F. b)*, circ. 12 feet in diameter. This presented itself as a low mound of débris rising only 2—3 feet above the ground. It bore manifest traces of having been dug into a great deal for the sake of sculptured pieces. On the surface of the débris I picked up two small fragments of relievo decoration in reddish stucco, showing remains of floral patterns familiar to the Græco-Buddhist style of Gandhara. About 20 feet to the south of the base of the chapel stands a small square cella with its walls, 7 feet long, built of well-dressed slabs and still tolerably preserved on three sides.

Ruined structure *E*.

About a hundred feet to the east of the circular chapel, but slightly further towards the northern edge of the little plateau, rise the much-decayed ruins of a structure *(E)*, the character of which at the time seemed to me distinctly puzzling. The remains appeared to be those of an oblong building measuring circ. 45 feet from north to south with a breadth of about 20 feet. They were reduced to the condition of a heap of débris in which the slabs once forming masonry walls could still be distinguished but no courses of masonry nor lines of walls made out on the surface. This heap of stone materials which looked as if shaken down by the collapse of massive walls rose about 10 feet above the present ground level at its northern and southern ends, but curiously enough showed a depression near the centre. Jutting out at right angles eastwards from the south-east and north-east corners of the ruined structure there were lateral continuation walls of considerable thickness, much decayed and traceable only for a length of circ. 15 feet.

Ruins of Stupa.

Almost due south of *E*, at a distance of circ. 90 yards by the plane table, but across a deep-cut little ravine coming from a fold in the hill slope behind, there lies a large circular mound, *G*, which is certainly the remains of a Stupa. It measures circ. 60 feet in diameter and rises to a height of about 23 feet above the level of the walled-up terrace on which it rests. The latter shows in front a massively-built supporting wall over 150 feet in length, constructed of large but irregular blocks. A shallow excavation on the flat top of the mound, which measures circ. 12 feet in diameter, shows that the interior of the mound was constructed of rough stones set in rubble and earth. Of the original facing of the Stupa I could trace no remains. A much decayed slab of blueish-grey

*For illustrations and a detailed account of the first-named structure and for a luminous discussion of the architectural features of such chapels, M. A. Foucher's recently published work *L'art greco-bouddhique de Gandhara* pp. 121 *sqq.* with figs 38, 39, may now be consulted. For the Gumbatai ruins, see my *Buner Report,* p. 25, Pl. IV.

stone, about 1 foot square, which was lying loose on the surface of the top, seemed to have borne the relievo representation of a seated figure, but this was effaced almost beyond recognition. It is very probable that this detached piece of sculpture was carried up to the top of the mound by somebody who might have found it convenient for a seat or otherwise at this commanding eminence. About 30 feet from the southern foot of the mound are the much-decayed remains of a small square structure *(G. b.)* raised on a separate terrace of which the northern supporting wall could be traced for circ. 15 feet.

Ruins of terrace *H.*

A large terrace *(H)*, which faced the Stupa on the west at a direct distance of circ. 80 yards and on the opposite side of the little ravine already mentioned, seems to have been richest in sculptured remains but its superstructures had in consequence also suffered most by diggings. Its facing wall measured circ. 180 feet from north to south with a breadth of over 100 feet. Over the whole of this terrace there were scattered heaps of débris manifestly composed of the stone materials of walls, &c., which had been pulled down while digging for 'idols.' Among these débris heaps I thought I could distinguish the scanty remains of two if not three little Stupas, represented by low, approximately circular mounds, of which the one in the centre measured about 12 feet in diameter. Among the débris of the surface of this I picked a number of small and thin fragments of white stucco bearing relievo representations of flower ornaments. Numerous pieces of a stone resembling *kankar* in structure, some of them showing traces of carving, were also lying about among the débris. But of sculptured stones and relievos only minute fragments could be traced on the surface of the rubbish heaps.

Sculpture from Banj.

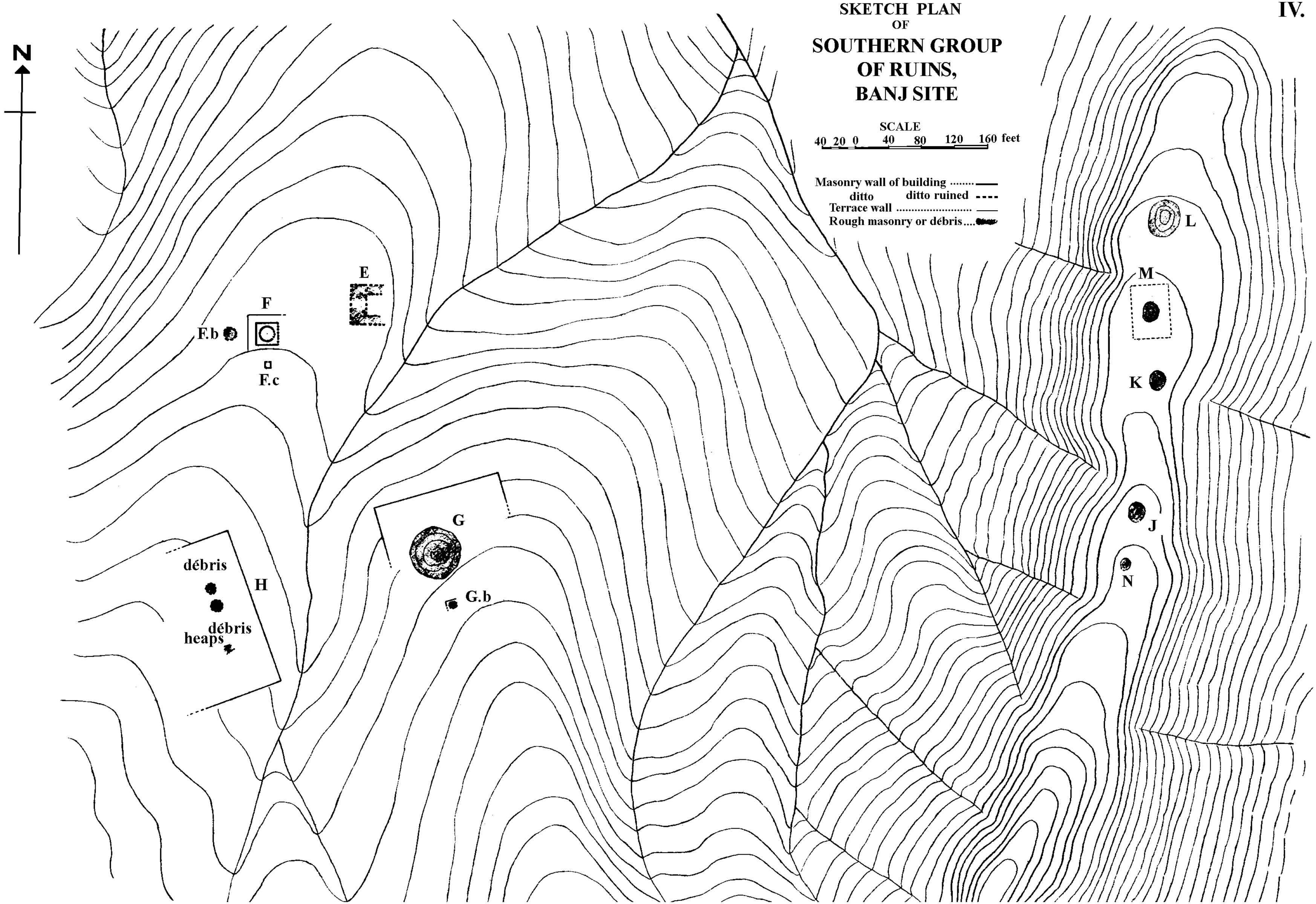
All pieces of sculpture had been carried away long ago. Utmanzais from Khabal had been engaged for long years in exploiting these ruins, and some of them who were present bitterly regretted that this mine of 'Buts,' by the sale of which to 'Sahibs' money could be made, had apparently been exhausted. About three years before Akbar Khan of Topi had still secured from here two good sculptures for a native friend of his in the Peshawar District who wanted them for presentation. Other and large sculptures appear to have found their way in recent years into the Hazara District. A European Police Officer of that district was particularly remembered as an eager purchaser, and it is hence probable that among the fine Græco-Buddhist sculptures sold by Mr. J. P. Rawlins, late District Superintendent of Police, Hazara, to the Fitzwilliam Museum at Cambridge, there are pieces coming from Banj.*

The diggings both among the ruins of *H* and around the little mound *F. b.*, previously referred to, had been carried at various points into the natural ground, and at both places I was much struck at the time by the bright brick-red colour of the rock fragments and detritus which had been turned up from the soil. But I did not realize the significance of this observation until later.

Ruins on eastern ridge.

The steep rocky slopes immediately behind and to the east of this group of ruins leave no room suitable for buildings. But to the east of it, at a direct distance of about 320 yards, the narrow rocky ridge, which as already noticed runs down in a north-easterly direction from the highest point of Banj Peak, shows for a short space a less abrupt gradient. The narrow shoulder thus formed, nowhere more than about one hundred feet across, is occupied by a series of small mounds, *J—N*, rising on a succession of little terraces over a total distance of circ. 150 yards. They are all approximately circular in shape, and thus suggest much-decayed Stupas. The diameters of four vary from circ. 12 to 25 feet. In the case of one *(M)* an oblong base of masonry, circ. 48 by 66 feet, could still be made out. The lowest of these mounds *(L)* is the largest, measuring circ. 40 feet in diameter. The latter still showed a height of approximately 15 feet. But owing to the steepness with which the ground of the ridge falls off on either side, and on account of the thick jungle scrub which grows around the mounds, correct measurements were difficult to take in the

* Of a statue of a standing Buddha, showing excellent workmanship, but unfortunately terribly mutilated (arms and legs have been hewn off, no doubt to facilitate transport!) it is acknowledged the "it was found among some ancient remains on the west bank of the Indus, just outside the Hazara District", see Grunwedel and Burgess, *Buddhist Art in India,* p. 168, with fig. 116.


SKETCH PLAN
OF
SOUTHERN GROUP
OF RUINS,
BANJ SITE
SCALE
40 20 0 40 80 120 160 feet
Masonry wall of building
ditto ditto ruined
Terrace wall
Rough masonry or débris
N
E
F
F.b
F.c
G
G.b
H
débris
débris
heaps
L
M
K
J
N

very limited time available. This ridge in its isolated position commands a good view over the ruins and the valley, and from it the photographs partly reproduced in the panorama, IX., were taken.

Vaulted room *I*.

Though the work of examining and plotting all these ruins had been pushed on without a moment's intermission since my arrival at the site, and though Surveyor Lal Singh rendered much useful assistance the afternoon was well advanced before I could start up to the peak which rose precipitously some 700 feet above us. Climbing along the rocky ridge just referred to I came, at an elevation of circ. 200 feet above the group of ruins last described, upon a small terrace covered with the débris of some building no longer recognizable in character. Below the level of the débris heaps, and partly overlain by them is a vaulted room or passage, *I*, the existence of which had already before been reported to me. It measures 21 feet in length from its south end, which is now completely exposed, and where the original entrance lay. The north end seems to have been closed by a wall which is now partly broken down. The width of the room is 7 feet 8 inches and its height 5 feet 9 inches from the present ground level. As the latter has, no doubt, been raised by the accumulation of rubbish, the original height was probably greater. The side walls, which show regular courses of well-dressed slabs, apparently sandstone, with horizontal rows of small flat stones between them, rise to a height of 2 feet above the present floor. On them rests a semi-circular vault formed by narrow overlapping courses and closed on the top by flat slabs circ. 1½ feet broad, the centre of which is grooved to a width of 10 inches. Each side wall shows three niches, 2½ feet high from the floor and partly cut into the vaulting, having a width of 2 feet and a depth of 1½ feet. There was no indication as to the purpose which these niches served.

Summit of Banj peak.

The remaining ascent to the peak gave me an opportunity to note the relatively rich growth of firs and shrubs which clothes its northern face notwithstanding the rocky soil and the steepness of the slope. A short distance before reaching the crags which form the highest point of the steeple-like peak, I noticed on a confined shoulder the remains of some small structure *(O)*, apparently round, forming a low mound circ. 12 feet in diameter. The view from the top was vast and impressive, comprising, besides the Yusufzai plains and the lower hills of Hazara, the whole of the southern and eastern slopes of Mahaban with a vista far up the Indus. The photographs taken from this height help me greatly in recalling topographical features of the region which I traversed on this tour. I only regret now that want of time prevented me from obtaining a telephoto view of a distant portion of the spur facing us on the north-east, where in the course of my enquiries some Gujars of Banj had pointed out to me the place of what they declared to be the ruins of two large 'Gumbaz.' The position indicated seemed to be a fairly large shoulder below the broad rounded peak which rises above the crest of that spur probably to a height greater than Banj, and which is visible also on the extreme right of view IX. Two of my photographs show, in fact, in that locality an unmistakable prominence; but whether it be an artificial mound, a natural hillock or a grove of tall trees, I am quite unable to make out. The hope of visiting the spot I had to abandon from the first, as it would have cost from three to four hours to reach it over the hill crest.

Descent from Banj.

When descending from the peak towards the southern group of the ruins by a different, though equally steep, track, I noticed the ruins of two more structures, apparently square, with a piece of artificially levelled flat ground in front of them, about 150 feet above *F* and to the south-west of it. But there was no time to tarry any longer. In accordance with the arrangements made by the Utmanzai Maliks, who had declared a stay at Banj quite impracticable owing to the great difficulty of providing supplies there, our camp had been sent on to Khabal, and I knew when finally leaving the ruins close on 5 P.M. that the longer and more difficult part of the day's march still lay before me. Nevertheless I did not expect so trying an experience as the descent from Mount Banj proved. The path, after leaving the ridge near mound *N*, became extremely rugged and precipitous, and continued so while dropping along the north slope of the main spur some 1,500 feet in elevation.

Owing to the steepness of the cliffs which the track skirts, in some places with a width of only a foot or two, the route is certainly impracticable even for led animals. Yet it is declared to be the only approach to Banj from Khabal. A narrow, but easier, ridge then led down to the Gujar hamlet of Kadura Khwar, from where a further drop of some 400 feet brought us to the bottom of the deeply eroded main nullah known as Indare Khwar or Khabal Darra just as it was getting quite dark. There the Utmanzai Jirga awaited us with ponies, and riding in the very stony and confined bed of the ravine, which at times of heavy rain must be quite impassable, we arrived at Khabal on the Indus about 9 P.M. This descent left me no longer in doubt as to the grounds upon which Mount Banj enjoys its fame for rugged inaccessibility.

SECTION viii.—THE SITE OF BUDDHA'S 'BODY-OFFERING.'

Significance of position of Banj ruins.

Having now recorded the observations which this day of arduous, but fascinating, work enabled me to make about Mount Banj and its ruins, it remains for me to explain the opinion to which I have been led as regards the character and identity of this remarkable site. The nature of the ruins described and of the remains they have furnished, makes it clear beyond all doubt that they mark the position of a Buddhist sanctuary possessed of shrines and monastic establishments. The importance of this sanctuary is indicated not only by the number of extant Stupas and other remains crowding all available space, but far more even by the situation in which it is found and the character of the surrounding country. It is clear enough that such numerous and relatively large shrines could not have owed their construction to the religious zeal of the people of a small mountain hamlet, and equally clear also that the resources of this barren little valley, so difficult of access, could not possibly have sufficed for the maintenance of the establishments which these ruins presuppose.

But these considerations apply with almost equal force to the whole surrounding hill tract. It is enough to compare the very limited areas rarely capable of irrigation which the closely packed spurs of Mahaban leave available for cultivation, with the great fertile valleys of Peshawar and Swat watered by large snow-fed rivers, in order to realize how little scope there was in these hills for that multiplication of monasteries and shrines which is so eloquently attested by the abundance of Buddhist ruins within the proper limits of old Gandhara and Udyana. We have hence no reason whatever to feel surprise at the scantiness of Buddhist remains within the Mahaban region.

This dearth of Stupas and convents is attested not only by the experience gathered on my tour when, owing to the willing co-operation of all tribal headmen, it would have been easy to learn of any ruins that might come under that category, but, perhaps, even more conspicuously by the relative rarity of any sculptured remains that have ever been brought from that region. Considering how thoroughly—to the irreparable loss of research—all the tribal territories adjoining the Peshawar border have been exploited until recent years for Græco-Buddhist relievos and statues, the comparative blank which the Mahaban slopes have presented for the native 'But-seeker', acquires special significance. With the exception of Banj, and perhaps Asgram, there is no locality within the territories of the Gaduns, Utmanzais and the Nawab of Amb which is known to have supplied sculptures to those professional diggers. If, then, we find extensive Buddhist ruins of such richness in sculpture as the remains of Banj once evidently showed, in one of the least accessible and economically least favoured localities of this hill region, we may, I believe, conclude with considerable probability that the sacred site which those ruins mark, was one possessed of a religious importance far exceeding local limits.

Site of Buddha's 'Body-offering' in Chinese itineraries.

I have thought it necessary to call special attention to this point, as by limiting the range of possible combinations it materially facilitates comparison between our archæological facts and the data we possess of the Buddhist *topographia sacra* of this region. These data are furnished to us by the Chinese pilgrims who visited Gandhara and Udyana. A careful scrutiny of

their itineraries, I believe, enables us to recognize in Banj the site of a famous Buddhist sanctuary long vainly sought for, the site where Buddha was believed to have in a former birth offered his body to feed a starving tigress.

Accounts of Chinese pilgrims.

The merit of having first rightly indicated the direction in which this important site was to be looked for, belongs to M. ED. CHAVANNES, the distinguished Sinologist, to whose labours archæological research in India and Central Asia is already so largely indebted. In the masterly commentary which accompanies his new translation of 'Song Yun's Travels in Udyana and Gandhara', he has plainly demonstrated that General Cunningham's long-accepted location of 'Buddha's body-offering' at Manikyala near Rawalpindi was based solely on misinterpretations of the texts of Song Yun and Hiuen Tsang, while in reality the topographical indications furnished by these travellers were pointing to the Mahaban region.* The justness of M. Chavannes' critical observations is easily recognized by a reference to the two itineraries.

From that of Song Yun, the earlier pilgrim (A. D. 520), we learn that he and his companion Huei-sheng after leaving the capital of Udyana, which certainly stood in the vicinity of the present Manglaur in Upper Swat, "proceeded in a south-easterly direction, and, after marching in the mountains for eight days, reached the place where the Tathagata (Buddha), while practising asceticism, offered up his body to feed a tigress. There high mountains rise with steep slopes and dizzy peaks reach up to the clouds." The narrative then refers to the charming woods and springs of the locality, to the motley profusion of its flowers, and records the erection by the pilgrims of a Stupa on the summit of the mountain to which they devoted a portion of their travelling funds. "There on a *stele* they engraved in square characters an inscription in praise of the merits of the Wei dynasty." We are told in addition that there stood on the mountain the 'temple of the collected bones' which counted three hundred priests.

Position indicated by Song Yun.

Taking first topographical details, it is clear that the direction and distance indicated actually take us to the hills south of the main Mahaban Range. A look at the map will show this as regards the direction of the journey. In respect of the distance implied by the eight days' march the corresponding record for Song Yun's journey from the capital of Udyana to 'Mount Shan-che' or 'T'an-to' affords a very convenient and safe standard of comparison.† The identity of this other famous site with the Mekha-sanda Hill in the close vicinity of Shahbazgarhi near Mardan has been established beyond all doubt by M. FOUCHER's brilliant researches on the ancient geography of Gandhara. Song Yun's narrative indicates for this journey the direction to the south-west and the distance of 500 li or five daily marches, which are both in full accord with the bearing and distance from Manglaur to Shahbazgarhi. If assuming for the present what has as yet to be proved, we locate the site of the 'Body-offering' at Banj and compare the distance by the most direct route from Manglaur to the latter place with that between Manglaur and Shahbazgarhi, we shall find that the proportion between these distances corresponds closely to that indicated by Song Yun's journeys of eight and five days, respectively.

It is, of course, impossible to indicate with any certainty the routes actually followed by the pilgrim. But it is clear from the map that in the case of Banj the nearest route would have led through the central valley of Buner into Chamla, and thence over some point of the Mahaban Range south-eastwards. For the journey from Manglaur to Shahbazgarhi the route down the Swat Valley, and thence across the Mora or Cherat Passes, would probably have been the most convenient. Measured on the map, without any of the necessary allowances for minor windings of the road and gradients, the distances represented by these routes are 64 and 48 miles respectively. If account is taken of the far greater extent of difficult ground which the route to Banj traverses, it will be realized that the proportion of 8 to 5 quite correctly

* See *Voyage du Song Yun L'Udyana etle Gandhara* in Bulletin de l'Ecole Francaise d'Extreme Orient, Hanoi, 1903, pp. 33 *sqq.*

† Compare *Voyage de Song Yun*, p. 35

expresses the relation between the actual road distances.* Finally it may be remarked that Song Yun's description of the mountain of the 'Body-offering,' though far less detailed than we could wish, agrees remarkably well with the assumption that Banj is the site intended. There are still the precipitous summits, the springs, and a relatively ample growth of trees and shrubs, at least on their northern slopes. If we compare the change in the condition of the Mekha-sanda Hill, now bare and barren, yet enthusiastically praised by Song Yun for its trees and flowers, it can be safely asserted that Mount Banj has succeeded far better in preserving those natural features which charmed the pilgrim some fourteen hundred years ago.

Topographical indications of Hiuen Tsang.

Hiuen Tsang's account of the sacred structures and legends of the site of the 'Body-offering' is far more detailed than that of Song Yun; but, on the other hand, his topographical guidance proves, at least on the first look, less explicit than we are accustomed to in the records of the greatest of Chinese pilgrims. Both his 'Memoirs of the Western Countries' and his 'Life' agree in telling us that after visiting the territory of Simhapura (in the eastern part of the Salt Range) Hiuen Tsang returned to the northern border of the territory of Takshasila or Taxila (now Shah-ke-Dheri) and crossed to the west bank of the Indus.† The point where he crossed is not indicated, but it is clear that it must have been somewhere between Und and Torbela; for above the latter point the eastern bank of the Indus would naturally fall within the limits of the kingdom of Urasa, which corresponds to the present Abbottabad and Mansehra Tahsils, and which Hiuen Tsang subsequently mentions as a distinct territory. On his return journey towards China the pilgrim also passed through Simhapura to Taxila, and thence going north-westwards crossed at Udakabhanda, which corresponds to the present Und.‡ Wherever he may have crossed the Indus on the previous occasion, we are told that he thence travelled for 200 li or two days to the south-east, and reached the spot of the 'Body-offering' after passing under a great stone gate.

It does not appear to have been noted hitherto that the south-eastern, bearing of the route here indicated is irreconcilable with geographical facts. The Indus between the point where it leaves the hills below Torbela down to Attock flows in a south-westerly direction, and can never in historical times have followed any other course owing to the configuration of the Attock hills. Hiuen Tsang after once crossing the Indus could not possibly have travelled to the south-east without at once *re-crossing* the Indus,—a fact of which there is no mention, and which would be an impossible supposition in any case. The direction to the east given in a variant of the text quoted by M. Chavannes from the *She kia fang che*, a Buddhist encyclopædia, meets with the same unsurmountable geographical objection.

Hiuen Tsang's route from 'Body-offering' site.

It is thus clear that the direction indicated, whether south-east or east, must rest on an error of some kind. Before attempting any conjecture as to the direction really meant it will be safer to turn for guidance to the route followed by the pilgrim from the site of the 'Body-offering' onwards. The narrative here presents nothing topographically obscure. Hiuen Tsang, leaving the above site, first proceeded 50 li or half a day's march eastwards to an "isolated mountain," where there was a high Stupa with a convent marking the spot of a wicked Yaksha's conversion by Buddha. Thence he travelled in a south-easterly direction for 500 li or five days through hilly country, and arrived in the kingdom of *Urasa*. That the latter is identical with the central part of the Hazara District is proved beyond all doubt by Hiuen Tsang's description of it and by the evidence collected by me from the Sanskrit Chronicle of

* It must be remembered that on the direct route from Manglaur to Banj two main watersheds at altitudes of not less than 6000 feet must be crossed, besides one of the passes between Buner and Chamla. On the route to Shahbazgahri only one pass, circ. 3500 feet high, has to be crossed.

† For translations of Hiuen Tsang's notice see Julien, *Memoires de Hiouen-Thsang*, i, pp. 164 *sqq.*; *Vie de Hiouen-Thsang*, p. 89; Beal, *Si-yu-ki*, i, pp. 145 *sqq.*; for a ctitical abstract and comments, Watters, *On Yuan Chwang's Travels in India*, i., pp. 253 *sqq.*

‡ *See Julien, Vie du Hiouen-Thsnag*, pp. 262 *sqq.*

Kashmir.* Its capital lay a short distance to the north-east of Abbottabad, in the fertile plateau between Mirpur and Nawashahr, which to this day bears the name of Urash or Rash.

Now, a look at the map shows that the natural and easiest route to reach this from any point to the west of the Indus which itself could be reached within two days and a half after crossing the river between Und and Torbela, lay up the valley of the Dor River. This descends from Mirpur and Dhamtaur, *i. e.*, the centre of Urasa, and joins the Indus at Torbela. The main route of communication from Hazara to the west of the Indus leads to this day along this valley, and we know well how carefully Hiuen Tsang clung to the high roads wherever he possibly could.† Assuming that he did so here, too, and that after re-crossing the Indus at Torbela, a favourite crossing place to this day, he followed the route of the Dor Valley, both the distance and bearing he indicates are easily accounted for.

From Torbela to Mirpur four marches are still reckoned at the present day, and the first and greater half of the route leads to the south-east. The fifth march still needed to complete Hiuen Tsang's route estimate would have to be looked for between Torbela and the site of the Yaksha's conversion. If my proposed identification of the Banj site with the place of Buddha's 'Body-offering' is right, then the remains of the Stupa and convent commemorating the Yaksha's conversion will have to be looked for on the high mountain shoulder to the east-north-east of Banj on which, as previously mentioned, the existence of two ruined 'Gumbaz' was reported to me. From that point to Torbela the distance would be just one march and the bearing exactly south-east.

Hiuen Tsang's route to site.

It is seen thus that Hiuen Tsang's account of the route he followed after his visit to the site of the 'Body-offering,' is quite consistent with the location of the latter at Banj. Returning now with this assurance to the point where we left the pilgrim on his way onward after having crossed the Indus, it will be easier for us, I think, to understand the indications given as to the remaining portion of his journey. Whether he crossed the river at Und, as he had done before when proceding from Gandhara to Taxila, and was to do again on his final departure from Taxila, or at some point higher up, as at Ghazi or Pihur, where much-used ferries exist to this day, it is certain that a two days' journey from the point of crossing would have sufficed to bring him to his goal if that be located at Banj. Only the direction of his journey instead of lying to the south-east or east—a geographical impossibility as already shown—would have been to the *north-east.* I do not know whether the rectification of bearing here suggested can be supported by a variant in any of the several editions of Hiuen Tsang's 'Memoirs' and 'Life.' But it appears to me that the need for such a modification, in view of the proved impossibility of the actually recorded direction, whether east or south-east, can in itself be no argument against the proposed location when the latter is so strongly supported, as we shall presently see, by Hiuen Tsang's own description of the sacred site.

Hiuen Tsang's description of 'Body-offering' site.

From this description as recorded in the 'Memoirs' we learn that the pilgrim after having travelled for the distance stated "passed under a great stone gate.‡ This was the place where Prince Mahasattva (*i. e.* Buddha before his enlightenment or *bodhi*) gave up his body to feed a hungry tigress.§ About 140 or 150 paces to the south was a stone Stupa (at the spot) where Mahasattva came, feeling pity for the beast which had lost its strength through hunger. At this spot he pierced his body with a piece of dry bamboo and nourished the

* See my notes on *Rajatarangini,* v. 217 also *ib.* II., pp. 434, and my *Memoir on the ancient geography of Kashmir,* 222.

† See A. Foucher, *Notes sur la geographie ancienne du Gandhara,* pp. 27, 46, 49 and *passim.*

Hiuen Tsang crossed Ursa in order to proceed to Kashmir by the route of the Jhelum Valley. It is hence of special interest to note that as I have explained in my *Memoir on the ancient geography of Kashmir,* pp. 23 *sq,* the old itinerary from the Peshawar Valley to Kashmir which Alberuni, writing less than four centuies after Hiuen Tsnag, has handed down to us, also passed through Torbela and the Dor Valley towards Mirpur. Alberuni's route seems to have slightly shortened the distance by leaving the Dor Vaslley below Haripur for the side valley of Babrahan. But this 'short cut' when I traced in in 1900, proved by no means an easy route for my baggage animals, and certainly offered no great saving in time.

‡ I follow Julien's translation *Memoires,* pp. 164, *sq.,* unless otherwise indicated. Beal's version does not does not materially differ from it except in one point noted.

§ The translation "tigress", instead of Julien's "tiger" is given by Watters, and is fairly justified by Song Yun's and Fa-hien's text and the Buddhist legend referred to belwo.

animal with his blood, whereupon it ate him.* At this spot the soil as well as the herbs and shrubs show a light reddish colour as if blood-dyed. When people dig the earth they feel as if pricked by thorns. All, whether sceptics or believers, are moved to feelings of sorrow and pain."†

To the north of the place of the 'Body-offering' there was a stone Stupa about 200 feet high which had been built by King Asoka. It was adorned with sculptures and of artistic construction. At all times it shed a divine light. Hundreds of little Stupas and stone niches were seen around this funeral monument.‡ Of the sick who made circumambulation most recovered health. To the east of this stone Stupa there was a monastery with about a hundred monks, all students of the Mahayana.

Identification of 'Body-offering' Stupa.

The essential indications which this description supplies for an eventual identification of the site, may thus be summarized : a large stone gate passed on approaching the actual spot of the 'Body-offering ;' to the south of this, at a distance of 140—150 paces, a Stupa marking this spot ; red-coloured soil and plants about this spot ; a stone Stupa to the north, at a distance not specified, richly built in stone and surrounded by many small Stupas and by niches or shrines in stone ; and, finally, a monastery holding a hundred monks to the east of the northern Stupa. I believe that the observations above recorded about Banj and its extant ruins enable us to trace at that site every one of Hiuen Tsang's indications. Starting from the south as the pilgrim's description does, we can first recognize the Stupa which was supposed to mark the actual spot of the 'Body-offering', in the large central Stupa mound shown as *G*.

According to Hiuen Tsang's account we ought to find to the north of it, and at a distance of circ. 140—150 paces, say 120 yards, the 'great stone gate' through which the pilgrim passed. A look at Plan iv. shows that exactly in that direction, and at a distance closely corresponding to the pilgrim's measurement (90 yards by plane-table, but probably quite 120 yards actual walking distance owing to the intervening little ravine), there rises the large ruined structure *E*. This oblong mass of ruined masonry, 45 feet from north to south with a breadth of circ. 20 feet, with its short flanking walls eastwards, had puzzled me greatly at the time of my visit ; for in no way could I account then for its structural appearance. The relatively steep rocky slope immediately to the east seemed to preclude the idea of the ruin representing only part of a larger building, while in its extant shape it certainly differed completely from any structures with which the many Buddhist sites I had seen in these regions had familiarized me.

Hiuen Tsang's 'great stone gate.'

Had Hiuen Tsang's Memoirs been in my hands at the time the resemblance of this ruin to a massive gateway with a large porch or partially closed terrace eastwards would, of course, have struck me at once. But the bulky volumes of the Si-yu-ki, otherwise my usual travel companions, had been left behind this time, as baggage on this tour had to be reduced to absolute necessaries, and it was only after my return to British territory that I could refresh my memory as to any details recorded by the pilgrim of the 'Body-offering' site. It seems to me now almost an advantage that these details were then present neither to my eyes nor my mind ; for I can thus feel quite sure that the observations I recorded on the spot were in no way unconsciously influenced by Hiuen Tsang's data.

As to the origin and purpose of this ruined structure in which I recognize in agreement with Hiuen Tsang a "great stone gate," it would be useless to offer conjectures. But it is necessary to point out that Mr. Watters' recently published posthumous translation (apparently an abstract in parts) gives a different meaning to the passage. It runs thus : "Our pilgrim crossed the Indus, and travelled south-east going over a great rocky pass. Here long ago the Prince Mahasattva gave up his body to feed a hungry tigress. About 140 paces from this was a stone Stupa, &c." The omission in

* Thus Watters. Julian in his note records the literal translation "alors l'animal mangea", but manifestly misses the point by interpreting this in the text as "alors cet animal recouvra sa vigueur premier."

† Watters translates: " Travellers suffering from the wild thorns of the place, whether they are believers or sceptics, are moved to pity."

‡ Watters renders this: "Small topes and above 100 small shrines encircled the grave."

this rendering of the distance of 200 li and of the bearing of the Stupa are manifestly due only to intentional condensation or else to an oversight. But the substitution of "over a great rocky pass" for Julien's "sous une grande porte de pierre" and Beal's equivalent rendering is undoubtedly the result of a different interpretation of the Chinese text. In the detailed notes attached to the passage no explanation is given as to the different meaning indicated. In the absence of any justificatory reasons the authority of Mr. Watters' rendering seems to me sufficiently counterbalanced by the fact that M. Chavannes in his abstract of the passage expresses himself in entire conformity with Julien's interpretation.* In addition it appears to me that if Hiuen Tsang had really meant to refer to "a great rocky pass," this attempt to fix the position of the Stupa in relation to it would be very strange. As far as my experience of the pilgrim as a topographer goes, it would be quite against his exact habits to indulge in the delusory accuracy of pace measurement, where the starting point for this would necessarily be quite undefined as in the case of "a great rocky pass."

Red soil of sacred spot.

The bright red colour of the soil at the southern group of the Banj ruins as disclosed by the diggings about *F* and *H*, and as already noted above, forcibly attracted my attention when surveying the ground. I had not noticed the same anywhere else, neither on the surface of the ground nor where the denuding action of recent rains in ravines or else ploughing in fields had laid bare the subsoil. We know from Hiuen Tsang's description that the pious eyes of the pilgrims saw in the red coloured soil around the spot of the 'Body-offering' a miraculous mark of the sacred blood there sacrificed, and as a natural feature of this kind cannot well disappear in the relatively short space of thirteen centuries, I look upon the fact observed by me as distinct evidence confirming the identification. To recognize specifically red tints in herbs and shrubs would require probably under all circumstances a certain amount of pious imagination, or in any case attention directed to this point. I confess that I was too busy to take much notice of the plentiful shrubs and herbs growing about the site, and cannot make any assertion as to their prevailing colouring. Nor would it be *à priori* reasonable to look out for a survival of the particular kind of vegetation to which Hiuen Tsang's pious attention might have been called by his local guides, considering the great changes which the climatic conditions of these regions, and with it their plant growth, are known to have undergone since the Muhammadan period.

According to Mr. Watters' translation, which seems to give here a more natural sense, the site must have abounded in thorny scrub, the pricks of which in the flesh of the devout helped to intensify their pitiful feelings for Buddha's martyrdom. The northern slopes of Mount Banj above and about the ruins are still plentifully covered with thorny shrubs of all sorts. But though I carried away vivid impressions of the pricks which their thorns inflicted in the course of my scrambles over these slopes (it took days before all their little spikes had been successfully removed from the clothes I wore that day), no special stress can be laid on this point; for other jungle-covered hills of this region and altitude probably are equally rich in thorns.

Position of Asoka's Stupa and of monastery.

To the north of the spot of the 'Body-offering' Hiuen Tsang mentions a large Stupa ascribed to Asoka, richly decorated in stone and surrounded by many small Stupas and shrines or 'stone niches.' To the east of it was a monastery holding a hundred monks. A look at the site plan (iii) will show that the large ruined mound *A*, in which I recognized the remains of a well-built Stupa base, lies due north of the group of ruins identified with the spot of the 'Body-offering,' and that it is adjoined on the east by the ruins of a large building, *C*, which has all the appearance of having served for the accommodation of a monastic establishment. As already stated above, both ruins are closely surrounded by cultivation, and the ground-level appeared to be covered with soil washed down from the higher slope of the ridge. I do not know whether this group of ruins, too, has been exploited for sculptures like the southern one; but it appears very probable, the only difference being that owing to continued cultivation the ground dug up would soon be levelled again and all trace of the

* See *Voyage de Song Yun*, p. 33, note 3.

débris effaced. It is therefore no matter for wonder that I failed to find here remains of small Stupas and shrines except in the ruined mound *B*, to the west of *A*, which actually shows a 'niche in stone,' and probably contains a good deal more of structural remains. The abundance around the southern Stupa *G* of small Stupa remains justifies the conclusion that were it not for the cultivation carried on at the northern group of ruins, the latter would show equally, or in view of the ampler space available, more numerous remains of small structures above ground. I may add that I attach all the more significance to the accord of the relative position and character of the ruin *C* with Hiuen Tsang's description, as the place occupied by it is the only one anywhere near the sacred spot which affords adequate level space for a building intended to accommodate a large monastic establishment. It is probable that Hiuen Tsang's monastery is the same which Song Yun mentions by the name of the 'Temple of the Collected Bones,' and in which he found three hundred resident monks.

Site of Yaksha's conversion.

I much regret that the exceptional pressure under which my survey of this site had to be carried on, did not leave me time on the spot for any enquiries about local Ziarats and legends. Thus I am unable to state whether the pilgrimage of sick people to this northern Stupa which Hiuen Tsang mentions, and which the earlier pilgrim Fa-sheng (see below) describes at length, has left any trace in surviving local worship. Nor was it possible for me to visit the ruins which, as previously mentioned, were described to me as situated at an elevated point of the spur to the east-north-east of Banj hamlet, and thus to ascertain whether and to what extent these remains correspond to the brief account given by Hiuen Tsang of the Stupa of the 'Yaksha's conversion' and of the adjoining monastery. The position pointed out to me would agree well with the bearing and situation of this minor site as indicated by the pilgrim. My photographs show terraced fields on that high shoulder of the spur, and on my march to Mangalchai I had specially noticed the rich forest vegetation which clothes the northern slopes of this spur. Hence we might well look there for the plentiful vegetation and the 'basins of pellucid fresh water' which the pilgrim refers to.

Other Chinese notices of 'Body-offering' site.

The references made by other Chinese pilgrims to the site of Buddha's 'Body-offering' are too brief to help us materially in its identification; yet they require mention as showing the great importance which religious feeling attached to it. Fa-hien (circ. 400 A. D.) mentions the Stupa marking "the place where the Bodhisattva threw down his body to feed a starving tigress" among the 'four great Stupas' of the north-west of India, and enlarges on the zealous worship paid to them by "the kings, ministers and peoples of the kingdoms around."* He places, however, this sacred spot apparently two marches to the east of Takshasila or Taxila, which is entirely opposed to the testimony of all other pilgrims, and manifestly only one of the numerous topographical errors which the extant record of Fa-hien's travels exhibits.

Fa-sheng's description.

Fa-sheng, a monk born at Turfan in Turkestan who visited India (circ. 424—453 A. D.), translated the Jataka text which told the story of the 'Body-offering,' into Chinese.† This translation, still extant in the Chinese Buddhist Canon, places the Stupa in Gandhara on a mountain to the north of *P'i-sha-men-po-lo* or Vaisravanapura, a locality nowhere else mentioned. Fa-sheng in a note ascribes the construction of the Stupa to the king of Gandhara, who heard at this spot from Buddha himself the story of this former birth. He also describes from personal knowledge the continuous great flow of people afflicted with bodily or mental ailments, who made pilgrimage to the site, and in return for their offerings obtained restoration to health. Fa-sheng speaks of habitations for five thousand monks, of a preaching hall and Vihara, all to the east of the Stupa, 'au pied de la montagne.' If the number of monks mentioned is anywhere near the truth, the shrine must have experienced an extraordinary fall in popularity within less than a century; for the matter-of-fact Song Yun, A. D. 520, found there only 300 monks. But the position of the monastery indicated by the enthusiastic translator agrees with Hiuen Tsang's statement, and also, if our identification is right, with the actual ruins. Finally

* See *Travels of Fa-hien*, tranal. Legge, p. 32; comp. regarding 'the four legged stupa', Chavannes, *Voyage de Song Yun*, pp. 8 *sq.*

† See Chavannes *Voyage de Song Yun*, pp. 33 *sq.*, note.

it deserves to be noted that a Chinese pilgrim of the Sung period (420–477 A. D.), quoted by Mr. Watters, places the site of the 'Body-sacrifice' "in a mountain to the west of Kashmir," which well agrees with our location.

Versions of legend of the 'Body-offering.'

How famous the story of Buddha's 'Body-sacrifice' was, which pious belief located in this distant corner of Gandhara, is sufficiently attested by our pilgrims and the numerous versions of the legend preserved in Buddhist literature. For these reference may be made to Mr. Watters' notes on Hiuen Tsang's passage. Those versions make special mention of the tigress' cubs which the Bodhisattva's sacrifice helped to save, and of similar details, but no useful indication is furnished by them as to the exact site where the legend was localized. The mention made in one of them of "Daliddi, a village not far from the rock Munda (otherwise called Eraka)" as the place where the Bodhisattva lived in that former birth, affords no guidance. Throughout, however, we see that the locality of the 'Body-offering' was believed to have lain in the mountains. It is, of course, possible that the legend had been localized also elsewhere by the Buddhists of different parts of India. But the site most widely celebrated, and the only one visited by our Chinese guides, lay certainly near that second birthplace of Northern Buddhism, Gandhara. I hope, my observations above recorded and the analysis of the texts made will suffice to demonstrate with great probability that this long sought for site may now be fixed on Mount Banj.

Section ix.—Ruined sites of Ghazi Shah and Asgram.

Ruined fort of Ghazi Shah.

The antiquarian observations made on November 2nd, the last day of my trans-border tour, can be recorded more briefly. On the morning after I had reached Khabal I visited the remains of the ruined fort of Ghazi Shah, situated circ. three-fourths of a mile above this large and flourishing Utmanzai village, and, like the latter itself, close to the right bank of the Indus. The ruins occupy the top of a narrow rocky ridge stretching from north-north-east to south-south-west, and rising circ. 100 feet above the water level of the Indus at the time of my visit. Its eastern foot is washed by a small branch of the river which, however, during the spring and summer floods is united with the rest of the channels. The west face of the ridge is separated from the foot of the hills by a level stretch of fields from circ. 100 to 150 yards across, the elevation of its top above these fields being only 40 to 50 feet. The top of the ridge, circ. 480 feet long from north-north-east to south-south-west, and from about 100 to 140 feet broad, offers a good natural position for defence, and has probably been occupied as such in times of need since early periods. Ancient copper coins are said to be frequently picked up on the slopes after rains. The few specimens I saw were small copper pieces of originally square shape much effaced, showing on one side the head of a king to right within a fillet border and traces of a Greek legend. They suggested barbarous imitations of the square copper coin of Eukratides shown in Prof. P. Gardner's British Museum Catalogue, Pl. VI. 5.

Plenty of rough walls of modern construction are to be found along the edges of the top, and also in the centre of the plateau formed by the latter, but remains of ancient masonry are traceable only near the northern end of the ridge. There the west face shows circ. 30 feet of a massive stone wall, formed by rough blocks, from 3 to 4 feet long and $1\frac{1}{2}$—2 feet high. These are set without regular courses, small stones being used to fill the interstices. The north end of the ridge slopes down to a small terrace, which is on a level with the fields westwards, but separated from them by a small ravine. This terrace, circ. 83 feet long from north to south and circ. 56 feet broad, still retains on its northern face a portion of an ancient supporting wall, circ. 33 feet long and 10 feet high, of the same type as just described. On the slope which joins the terrace to the plateau recent diggings disclose in various places remains of walls built of small rough stones after the 'Gandhara fashion.'

Gandap.

From Khabal we marched down by the right bank of the Indus for circ. 5 miles to Kiara, and thence crossed the main spur descending from Banj, to the large and populous village of Gandap, almost deserving to be called a town, the chief place of the Salar Gaduns. I was anxious to visit Asgram, an ancient

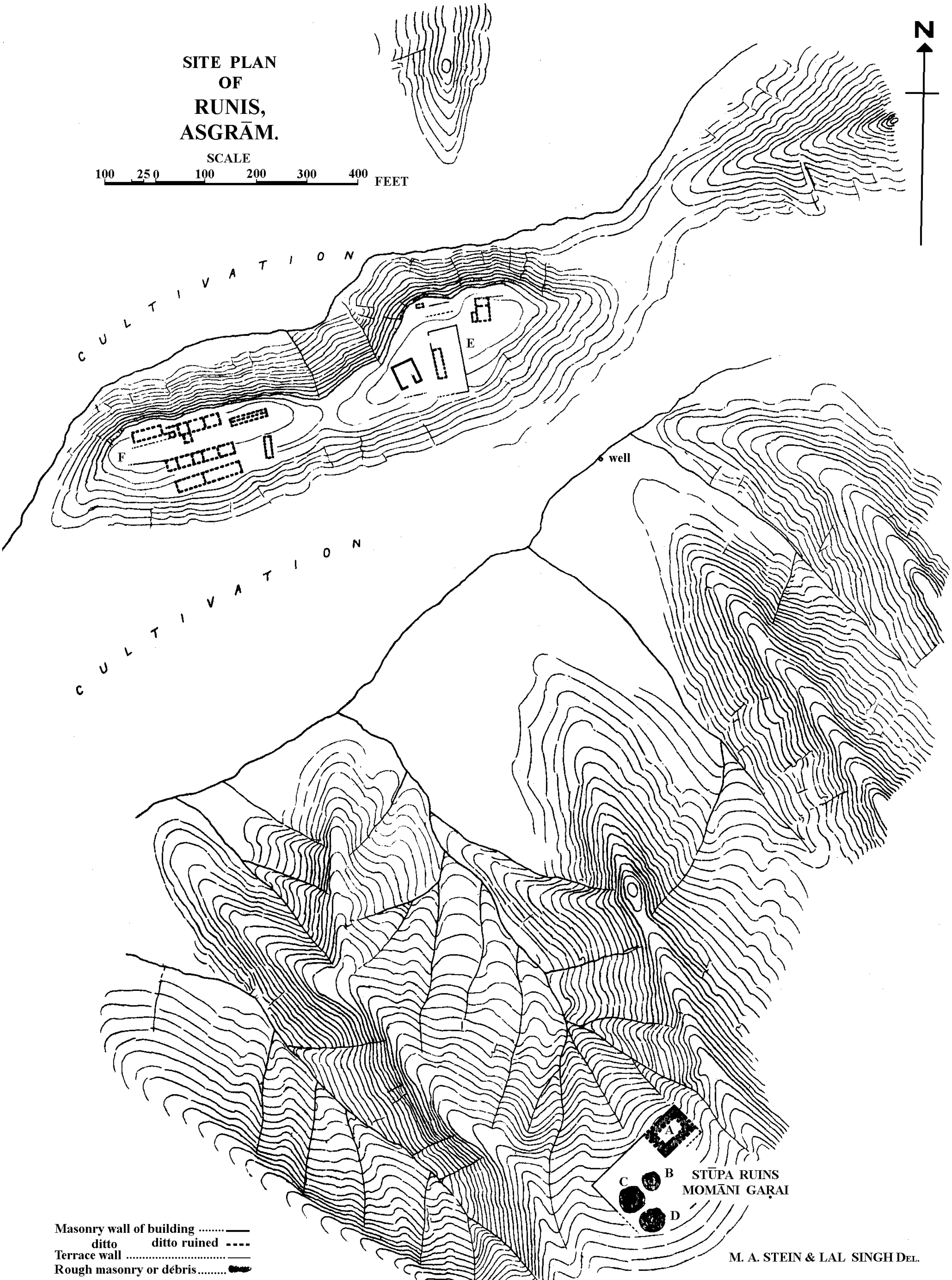
site in its vicinity, of the ruins of which information had reached me for some time back. Gandap itself occupies a large fertile plateau which is situated to the west of the spur just mentioned and slopes down towards the open broad valley of the Polau Khwar containing the drainage from the south face of the main Mahaban Range. In the vicinity of Gandap apparently lies that portion of the whole Mahaban region which affords most scope for cultivation, and consequently the plentiful evidence of its early occupation is not surprising. Gandap itself is probably not an old place, but the site known as *Jamra* at a short distance to the north of it undoubtedly marks the position of a town of considerable antiquity. Being assured that Jamra presents no remains above ground, I preferred to reserve the limited time available for Asgram. The examination of the numerous old copper coins shown as having been picked up on the slope of Jamra sufficed to prove the antiquity of the site. They comprised pieces of Gondophares, Soter Megas, of Kadphises and other Indo-Scythian rulers down to the Little Kushans and Hindu Shahis of Kabul. Earlier Greek coins are probably also found, but soon sold to the coin-dealers of Rawalpindi and Peshawar.

Ruins of Asgram.

The ruins of *Asgram* proved to be situated circ. 2 miles in a direct line to the south-west of Gandap on a low plateau encircled by an amphitheatre of hills, except on the west and south-west where it opens towards the broad plain of the main valley. The ruins, to which the name Asgram properly applies, occupy the top of a small isolated ridge which slopes down from a height of circ. 70 feet above the surrounding level ground at its east-north-east extremity to one of circ. 40 feet at the west-south-west end. The ridge on its top measures circ. 300 yards in length with a width varying from circ. 65 to 40 yards. The ruined buildings occupying the top are divided by a small unoccupied depression in the middle of the ridge into two separate groups marked *E* and *F* in Plan v. The latter, which is the larger, shows a series of ruined structures up to 140 feet in length, with an average breadth of circ. 20 feet, ranged in the direction of the axis of the ridge. These buildings, which stand partly on walled-up terraces, show walls between 3—4 feet thick rising to a maximum height of circ. 5 feet above the ground. Cross walls dividing these long structures into rooms and halls can be traced in many places; but they as well as the longitudinal main walls are broken down in so many places that without excavations it would rarely be possible to determine the exact position of the entrances and similar details. As I was obliged to leave the detailed plotting of these ruins to Surveyor Lal Singh, no attempt could be made in this part of the plan to indicate the architectural disposition of the structures. They are built throughout in solid masonry of the "Gandhara fashion" arranged in regular courses. The slabs used in it show average dimensions of 1—1½ feet by 4–6 inches in height and 8—10 inches in thickness. The ruined buildings of group *E*, less numerous, show exactly the same construction. Among them is an isolated hall with an inside measurement of circ. 45 feet square, and to the east of it a less clearly traceable elongated structure rising on a terrace circ. 140 by 60 feet.

Character of Asgram site.

I could find no indication of any enclosing walls or other defensive works on or near the ridge, nor any ruin that could possibly suggest a Vihara, Stupa or monastic building. Judging from the solidity of the construction, the large size of the extant remains, and the commanding position they occupy, it appeared to me probable that these ruins mark the position of what might have been the public buildings or the palace of a relatively large place. The height of the ridge above the surrounding small plain would scarcely have sufficed for defence; but it was more than sufficient to give prominence to any buildings raised on it. There are now no remains visible above ground in the fields which almost completely encircle the ridge, but the very fact of this fertile ground having probably for a long time been under cultivation would suffice to account for the complete disappearance of less substantially built dwellings which might once have surrounded the little acropolis on the ridge. Nor should the probability of the original ground-level of the plain having been considerably covered up by detritus washed down from the much disintegrated hill slopes around be lost sight of. Ancient copper coins are said to be plentifully found on and around Asgram after rains, but unfortunately I could obtain none


SITE PLAN
OF
RUNIS,
ASGRĀM.
SCALE
100 25 0 100 200 300 400 FEET
N
CULTIVATION
CULTIVATION
E
F
well
A
B
C
D
STŪPA RUINS
MOMĀNI GAṚAI
Masonry wall of building
ditto ditto ruined
Terrace wall
Rough masonry or débris
M. A. STEIN & LAL SINGH DEL.

on the spot. Cultivation is carried on by people living for safety's sake at Gandap, and it is quite possible that some of the coins shown to me at the latter place really came from Asgram.

Coins undoubtedly found at Asgram would have a special interest because their evidence would be useful as regards the approximate age of the ruins, and thus also as regards the identification first proposed by Colonel Deane of Asgram with the *Asigramma* of Ptolemy.* The Greek geographer (VII. i. 57) mentions this place among the towns of Indo-Scythia situated along the River Indus. Of other towns in the same list only Embolima is otherwise named, and the position of this, too, as shown above, is uncertain. The very small critical value attaching to the delusively exact longitudes and latitudes shown by Ptolemy for localities in India and elsewhere in the East is well known. Hence the above identification must rest mainly on the similarity of the names, the position of Asgram, and on the character of the ruins which it can show. These ruins certainly seem to me to indicate the existence at this site of an ancient local centre corresponding in importance to the present Gandap, and as its distance from the Indus across the hills eastwards is only about 3 miles, Colonel Deane's identification must now be considered as highly probable. Ptolemy's Asigramma.

In one of the little nullahs which run down towards Asgram from the stony hills to the south-west, and at a walking distance of about half a mile, there nestles a small group of ruins undoubtedly representing the remains of a Buddhist monastery with its Stupas. It is known as *Momani-garai*, and occupies an artificially levelled oblong terrace at the point where the head of the nullah widens out to a small amphitheatre (see fig. XI.). The rough wall supporting this terrace, from 5 to 10 feet high, can be traced on the front facing north-west in a length of circ. 225 feet, and on the side faces for circ. 75 feet. In the northern corner of the terrace rises a large oblong ruin *A* measuring outside 85 by 62 feet, in which notwithstanding the advanced decay of the masonry it was easy to recognize the remains of a Buddhist monastery. An open court measuring approximately 50 by 25 feet is enclosed by an oblong mass of masonry débris, 16 feet in width on the average, which undoubtedly covers the area originally occupied by the cells of the monks. At the north and south corners the lines of the outer and inner walls of the quadrangle can still be clearly distinguished with their masonry of the Gandhara type built in regular courses. The removal of the débris, which now rises in most places to a height of circ. 15 feet above the level of the terrace, would probably reveal the exact measurements of the original ground plan; but in the present condition of the ruin it seemed impossible to determine even whether the entrance lay to the south-east or south-west. Judging by the relative dimensions as compared with those of the Sale-dheri convent (see plan i.), this monastery might have contained accommodation for approximately 16 monks on the ground floor. But, judging from the height of the débris, the existence of superstructures appears probable. Ruined monastery of Momani-garai.

To the south-west of this ruin, and on the same terrace, rise close together three circular mounds (indicated in the photograph by figures of men standing on their tops) which can only be the remains of Stupas. The largest of these mounds, *C*, occupies the centre; the smaller mounds *B* and *D* are to the north-east and south-east, respectively, and so placed that the prolongations of the diameters of the latter two Stupas would cut each other in the centre of *C*. The central mound shows an approximate diameter of 50 feet at the base and a height of circ. 25 feet; a broad cutting has been made into this mound up to its centre and carried down to a depth of circ. 15 feet from the top. The mounds *B* and *D* show at the base diameters of circ. 34 and 44 feet, with approximate heights of 12 and 27 feet, respectively. These mounds, though much dilapidated, do not appear to have been dug into, at least in recent times. The excavation made in *C* showed that this mound, and evidently the others also, were solidly built of rough stones packed with smaller flat pieces but not set in regular layers. Of carved stone remains no trace could be found on the surface of the mounds nor on that of the débris-strewn ground around it. Nor was I able to ascertain as to whether the ruins had been exploited for sculptures. Ruins of Stupas.

*See Colonel Deane's paper *J. R. A. S.*, 1896, p. 674.

Conclusion of Mahaban tour.

I did not succeed in completing my survey of the Asgram ruins until it was getting dark, and it was long after nightfall that I recrossed the border towards our camp pitched at Topi. At the latter next morning I said farewell to the Jirgas of the several tribal sections who had faithfully carried out to the last the compact that alone had rendered my explorations possible. They were now assembling to receive from Mr. Pipon's hands the liberal compensation which Colonel Deane had generously sanctioned for them and their tribesmen in the event of the safe conclusion of the tour. During the six days which the tour had lasted since the start across the border to our arrival at Topi, it had taken us over upwards of 90 miles, almost the whole of which lay over rough mountainous ground and was done on foot. In addition to the archæological results above recorded, over 200 square miles of previously unsurveyed ground were carefully mapped by Surveyor Lal Singh. Having, besides my own tasks, exercised constant supervision over the plane table work, I can safely express the hope that the two miles to the inch map of the Mahaban region now obtained will neither in adequacy of detail nor in standard of accuracy be found to fall short of similar scale maps of other parts of the Afghan trans-frontier region which had been surveyed under conditions implying equal strain. For Surveyor Lal Singh's devoted efforts I wish to record here once more my hearty appreciation as well as—last but not least—my sincere tribute to the excellent "tribal arrangements" by which Mr. Pipon had assured to the end the successful completion of my programme.

Section x.—Ancient remains in Pishin, Nushki and Kharan.

Tours in Baluchistan.

During the six weeks of my first inspection season in Baluchistan—in November-December, 1904—I endeavoured to survey whatever sites of archæological interest were within reach on my tours of inspection. The latter extended to every District and Agency of British Baluchistan with the exception of Zhob, and necessitated travels by road over distances aggregating to 526 miles during the 30 days spent outside the Quetta head-quarters. If thus the time available for each individual site was very limited, I had at least opportunities for studying those main features of the local geographical and ontological conditions, a knowledge of which is essential for all historical and antiquarian research bearing on these regions. The observations recorded on these tours will prove a useful addition to the materials already collected by me for a systematic study of the ancient geography of the border lands of India and Iran. In the present Report I shall restrict myself to briefly recording the results of the preliminary surveys which I was able to effect at a number of ancient sites. None of these had been previously visited by a professed archæologist; but notes regarding most of them had been collected through a variety of channels by Mr. Hughes Buller, I. C. S., Superintendent, Baluchistan Gazetteer, who in connection with his Gazetteer labours has devoted much interest and attention to the antiquarian remains of the Province. By kindly communicating to me the notes available in his office he enabled me to ascertain beforehand the remains which might be visited on my routes; he also greatly facilitated the practical arrangements for my tour south of Nushki in Kalat territory. For Mr. Hughes Buller's ever ready help as well as for the useful guidance which his Chief Assistant, Rai Sahib Jamiat Rai, Extra Assistant Commissioner, offered me by his local knowledge, I wish to express here my grateful acknowledgments.

Mound of Raissa-Ghundai.

The plain of Pishin, mentioned already in the Avesta, is the oldest historically attested oasis of Baluchistan. Hence I was specially interested in visiting what is apparently the largest of the relatively few ancient mounds traceable within its limits. The mound known as *Riassa-Ghundai* is situated circ. 9 miles to the north-north-east of Pishin Tahsil, and about 1 mile to the north-east of the 'Band' of Khushdil Khan. It rises on a small plateau of gravel which is skirted by the Sirdar Karez and adjoined northward by the fields of the small village of Chustian sloping down to the left bank of the Lora River. The mound, circ. 120 yards long from north to south, with an average breadth of circ. 60 yards at its foot, still shows a height of circ. 50 feet above the level of the fields south of it. Extensive excavations carried out after the

fashion of those at Akra and for the same purpose have completely destroyed the old slopes to the south and east. These diggings make it easy to ascertain that the whole mound is composed of accumulated 'culture strata' containing great quantities of broken pottery, rough building stones, ashes, bones and similar débris embedded in soft earth, which evidently represents the remains of mud walls. The pottery, generally coarse and undecorated, proved of remarkable hardness, and among it fragments of large jars were frequent. Some pieces belonging to the mouths of such jars showed a simple scroll ornament. Small fragments of a finer red pottery painted with simple lineal patterns in black were also plentiful. Of structural remains I could find no trace, nor could I hear of coins of any sort being ever found on or around the mound. The north and north-east foot of the latter is adjoined by a low plateau of similar origin, rising only circ. 15 feet above the field level. This, too, is being now dug into for manuring soil. This plateau may either mark the remains of a mound dug down already at an earlier period or else a site of later or less continuous occupation. Some small fragments of pottery glazed in yellow and light green could be picked up on its surface.

At a distance of circ. 500 yards to the east of the mound and parallel to it stretches a narrow steep ridge composed of conglomerate rising circ. 100 feet above the fields. This ridge, which at its south end is connected with other but lower ridges running at right angles to it, bears pottery fragments on its top and slopes, thus showing that it, too, was occupied in earlier times. Another mound, known as *Manzakai-Ghundai*, was visible circ. 1½ miles to the north-north-east across the bed of the Barshor branch of the Lora. It was described as being of the same character and composition as Riassa-Ghundai. As to the periods during which the latter accumulated I was unable to form any definite opinion. In the absence of coin finds, which in the whole of this region seem to be of remarkable rarity, or of similar reliable evidence no chronological classification of the pottery seems at present possible. All that can be safely asserted is that the accumulation of so high a mound presupposes occupation prolonged for a considerable period. This itself is easily accounted for by the favourable position of the site, the adjoining ground offering special facilities for irrigation both from the Lora and from the drainage area now closed by the Khushdil Khan Band.

The visit which I paid to Nushki enabled me not only to form some idea of the character of the desert which hence stretches towards Seistan, and the comparison of which with the deserts of Turkestan offered for me special points of interest, but to trace remains of unmistakable antiquity at the newly developed emporium of Nushki itself. On riding up the hillock on which the Political Agent's bungalow stands, I noticed old pottery débris, and by subsequent examination found evidence of this prominent position having been occupied probably at an early period. The hillock is composed mainly of alluvial deposit, and rises circ. 70 feet above the bed of the Kaisar stream which washes its southern foot. Its top after having been artificially levelled some eight years ago, now measures circ. 140 yards from north to south with an average width of about 100 yards. Owing to its commanding height and isolated position the hillock must have always attracted notice as a place suited for defence, and accordingly I was not surprised to find remains of old walls at several places on the south face which falls off precipitously towards the stream. The masonry which erosion of the steep slopes had laid bare, consisted of regular courses of flat slabs unhewn but set with care. Similar work is not, and probably never was, known to the Brahuis and Baluchis now sparsely inhabiting the country. *Ancient remains at Nushki.*

On enquiry I ascertained that when the top of the hillock was being levelled for the present bungalow, a number of round jars of a make and size no longer known had been brought to light not very deep beneath the surface. One of these jars proved to have been preserved in the fort containing the Tahsil and to be a relic of distinct interest. It measures 2 feet 5 inches in height with a diameter of 2 feet 6 inches where widest, and is made of a hard red clay circ. half an inch thick. From its mouth, which is circ. 1 foot wide, down to the line of greatest perimeter the jar is decorated with a succession of bands painted in black colour and fairly well preserved. The band nearest to the mouth shows *Find of ancient jars.*

a plain pattern of diagonal lines between two horizontal ones; next follows one with a bold spiral scroll ornament, while below this is a band showing fishes in double row. Below these bands, each of which is circ. 5 inches high, follows a succession of plain black stripes down to the line of greatest perimeter. It is very desirable that this interesting piece of ancient pottery be properly taken care of, and I have recommended its removal to the Quetta Museum now in course of construction. A second vase of similar material, but perfectly plain and circ. one foot in height, was the only other object from that find I could trace at Nushki. My enquiries after old coins in the Bazar and among village headmen were unsuccessful; none appear ever to have been found in this neighbourhood. As Nushki owing to its water supply can never in historical times have been a locality entirely uninhabited, I can recognize in this dearth of old coins of any description only evidence of the very primitive cultural conditions which have prevailed in great portions of Baluchistan down to our own time. As to the age of the pottery above described I cannot safely express an opinion.

'Gumbaz' near Nushki.

At Nushki I had touched the line of route followed by Pottinger in 1810 on his celebrated journey through Baluchistan into Persia. As on reading its account long ago I had been struck by the description given in it of some very curious ancient structures which Pottinger had seen at some distance south of Nushki and which he believed to be of Zoroastrian origin, I was anxious to visit them. Locally nothing was known of such ruins, but a search for them seemed all the more justified since I succeeded in finding in the immediate vicinity of Nushki, and exactly in the position indicated by Pottinger, the remains of a 'Gumbaz' which Pottinger mentions in connection with the tradition of an ancient town,* and which was equally unknown to the local authorities. This ruin, called *Magul* by the old Saiyid guide who took me to it, proved to be situated at a distance of circ. 3 miles to the south-west of the modern fort of Nushki, and to consist of a narrow vaulted passage circ. 12 yards long, half-buried under the drift sand of the surrounding desert. It is built of sun-dried bricks and surmounted by a shapeless mass of decayed masonry of the same kind. The vault, being constructed on the principle of a true arch, indicated the Muhammadan origin of the structure, and the remains of some old tombs to the south of it fully confirmed this conclusion. Old pottery débris strews a patch of eroded clayey ground near by. My guide did not know of the romantic legend which Pottinger had heard of the ruin, but connected it with an equally miraculous story of the escape of some holy persons who took refuge in the 'Gumbaz.' I have little doubt that the latter is the remains of a Muhammadan tomb possibly of the time of 'the Arabs' to whom local tradition in this dreary region ascribes most traces of ancient occupation. Of the large stones which not far from this spot had been pointed out to Pottinger as marking the footprints of Rustam's steed, I could hear nothing. Have they been covered up since by the moving dunes of the desert?

Search for Pottinger's ruins on Kharan route.

The search for the more interesting ruins which Pottinger had seen on his third march south of Nushki, proved far more difficult. From certain topographical indications I concluded that on his way into Kharan he must have followed the route crossing the range of mountains south-west of Nushki by the Tafui Pass. But the country being in Pottinger's days quite as devoid of permanent habitations as it is now, and, of course, unsurveyed, his narrative does not supply such local names or other *indicia* by which his line of route or the site referred to could be fixed with precision on the modern map. Nevertheless the close agreement of Pottinger's description with the ground seen by me on the Tafui route as well as his mention of the Bel stream (his 'Bale') make me now feel certain that he actually travelled by this route.

The information gathered from some Brahuized Hindus coming from Kharan, the only travellers we met *en route*, pointed to the existence of ruined mounds near the route some miles to the north of Nauroz-Kalat. This was confirmed by what was known to some nomadic Brahui shepherds we picked up at our second encampment near a well in the dry bed of the Bel.

* See *Travels in Beloochistan*, 1816, p. 123.

Under the guidance of one of these shepherds I proceeded on the morning of the third day to the ruined site spoken of. It proved to be situated by the left bank of the broad river bed which is formed by the junction of the Bel with the Baddo River, coming from the mountains to the north-east, and known in its upper course as Liji or Chiringi. The old site known, like all ruins of this region, by the general term of 'Kona-shahr,' so familiar to me from Turkestan, lies about 1½ miles below the junction just referred to, which is marked by the Ziarat of Sheikh Hussain ('Shah Hasan Ziarat' of North-Western Trans-Frontier Map No. 22). It occupies the angle formed between the bed of the united Bel and Baddo Rivers and a small dry nullah known as *Toji* which joins it from the north-east. The distance from Nushki, which by the map as well as by an approximately accurate road estimate was shown to be about 66 miles, agreed remarkably well with Pottinger's indications; but though there were the "several large mounds of earth and stone scattered over the desert" to which his description refers, no trace could be found of the "very extraordinary tombs" of a quadrangular shape, "each surrounded by a low wall of curious open freestone work," which he mentions at a distance of circ. 400 yards from the western bank of the river.*

'Gabar-band' of Toji.

The remains actually seen by me at this 'Kona-shahr' of Toji were briefly these. Before ascending the high bank to the east of the river bed I noticed one of those ancient dams which are known in Kalat territory as 'Gabar-bands', *i. e.* 'Bands' of the Gabars or fire-worshippers, and which must have served to form storage tanks at periods when cultivation was carried on in parts of the country now devoid of all permanent settlements. It consisted of an embankment circ. 40 yards long and about 20 feet broad at the base, built at right angles to the bank of the dry river bed, and showing a core of massive masonry of unhewn stones. Above this 'Band' the gravelly ground was thickly strewn for several hundreds of yards with rough stones once apparently used in buildings and with fragments of plain pottery, while small oblong mounds of unhewn stones unmistakably marked graves. The latter may possibly be of relatively modern date and belong to the nomadic Brahuis, who still visit these parts during the summer for grazing purposes. But the burial ground is no longer used now.

Ancient mounds of Toji.

Crossing the Toji Nullah to the south, close to its junction with the river bed, I found in the angle between the two a débris-strewn mound measuring circ. 100 yards from north to south and about as broad on its northern face. The north-west corner rises steeply circ. 35 feet above the river bed. Here some recent digging had exposed short lengths of two walls meeting at right angles. The masonry of these walls, circ. 3 feet in thickness, showed masonry of small unhewn slabs arranged in carefully adjusted courses and undoubtedly old. The walls appeared to have enclosed a small square room and to continue both to the south and east in the débris-covered ground. Remains of walls of similar construction, circ. 4—5 feet in height, are traceable on the slopes where they may have served to form terraces. Plentiful old potsherds, among them fragments decorated in simple brown patterns on red ground, covered the top of the mound and its slopes. A second, but smaller, mound which occupies a little plateau to the south, separated by a shallow ravine, shows similar pottery and much débris of rough stone material, but no intact remains of walls. Where the two mounds are nearest to each other, remains of an old 'Band' survive, built across the small ravine, with a thickness of circ. 8 feet.

That the ruins just described are of some antiquity may be considered as certain in view of the deserted condition in which this tract, like most of the rest of Kharan, has been for long centuries. The masonry of the walls, too, bears an ancient look, and cannot possibly have been the work of Brahuis in their present stage of culture. But in the absence of dateable remains, and in view of the extreme dearth of reliable historical information concerning these parts of Baluchistan in earlier periods, it would be useless to attempt any estimate of age in regard to these mounds and a similar one which I passed some six miles to the north-east in a portion of the wide bed of the Baddo known as *Toskan.*

* See *Travels in Beloochistan*, 1816, p. 126

Remains such as Pottinger describes might by their style and structural character have supplied some clue to the period of their origin, and thus of the earlier occupation of their vicinity. But of such remains we could discover no trace on either bank of the river, though the ground lay quite clear and open before us sloping down towards Nauroz-Kalat some four miles to the south. In a region with so dry a climate and so sparsely inhabited it is difficult to believe that substantial ruins with carved stone work could within a century have disappeared without leaving some trace. I am rather inclined to believe in the possibility of some error in Pottinger's road estimate and of the ruins being really situated some distance further south. Yet neither the Hindus who had come from Kharan, and whose information about the Toji mounds had proved quite exact, nor my actual guide knew anything of ruined structures between Nauroz-Kalat and Kharan. Want of time did not allow me to make a personal search beyond Nauroz-Kalat, and consequently I must content myself with the hope that some future visitor, whose attention may be called by these lines to Pottinger's interesting notice, will succeed in tracking the ruins. Whatever their character may have been—and Pottinger could trace nothing whatever Muhammadan or Hindu in their style, and had judicious doubts also about their having served as Zoroastrian places of worship—they would denote a far higher state of civilization than these tracts have known for centuries.

Observations at Mastung.

On my return journey through Kalat and Mastung I had occasion to make some archæologically interesting observations as to the steady rise of the ground level within the latter oasis owing to silt deposit from irrigation. These observations were of special interest to me as affording an apt illustration of the process which I have had occasion to trace in detail during my explorations at ancient sites within oases in Chinese Turkestan.* Of details relating to Mastung it may suffice to mention that I found pieces of ancient pottery at a considerable depth below the present level of fields, at places where cuttings in the ground made it easy to see that the soil of the latter consisted solely of fine alluvium without any perceptible stratification. I was also struck by the fact that just as at Khotan old roads in those parts of Mastung which are known to have been under cultivation for a very long time, lay considerably below the level of the fields they pass through. To complete the exact parallelism of the facts observed in such widely separated areas, I may add that, owing to the presence of drift sand in the immediate vicinity of Mastung, the rise of level in irrigated fields is probably aided here too by a subaërial deposit of fine sand or dust.

SECTION xi.—ANCIENT SITES OF LORALAI, THAL AND CHHALGARHI.

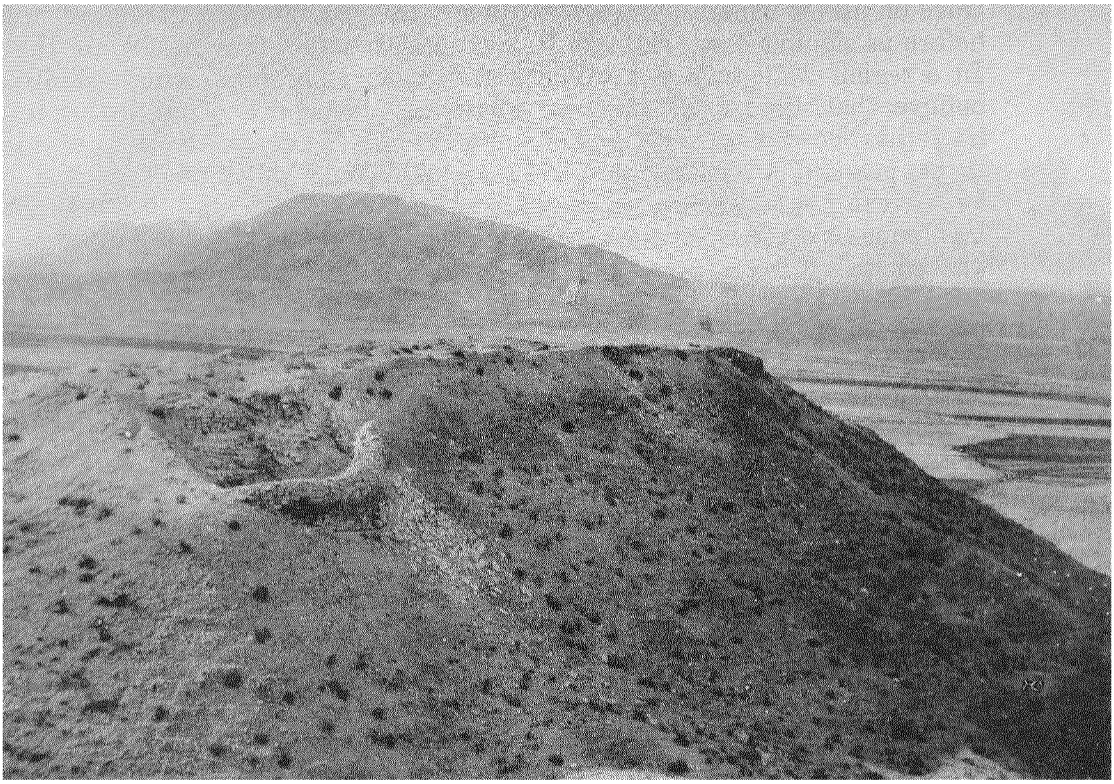
Forts of "Monastery Hill," Loralai.

The ruined fortifications of "Monastery Hill" near Loralai, which form by far the most conspicuous of ancient structural remains I saw or heard of in Baluchistan, were first mentioned to me on my visit to Loralai by officers of the 32nd Lancers. They crown the two westernmost ridges of a group of low hills which rise from the level of the valley circ. 3 miles to the south-south-west of Loralai Cantonment. These ridges are narrow on the top and rise with steep stone-covered slopes to a height of circ. 200 feet above the flat of the valley, which is now irrigated in extensive patches both to the north and south. The ruins are those of two separate forts, one crowning the top of a small narrow ridge to the west and the other stretching in a form resembling a horseshoe along the crest of a larger ridge on the east. The sketch plan on Plate i. (made without a proper plane table and by means of pace measurements only) shows the approximate position and outlines of the ruined walls.

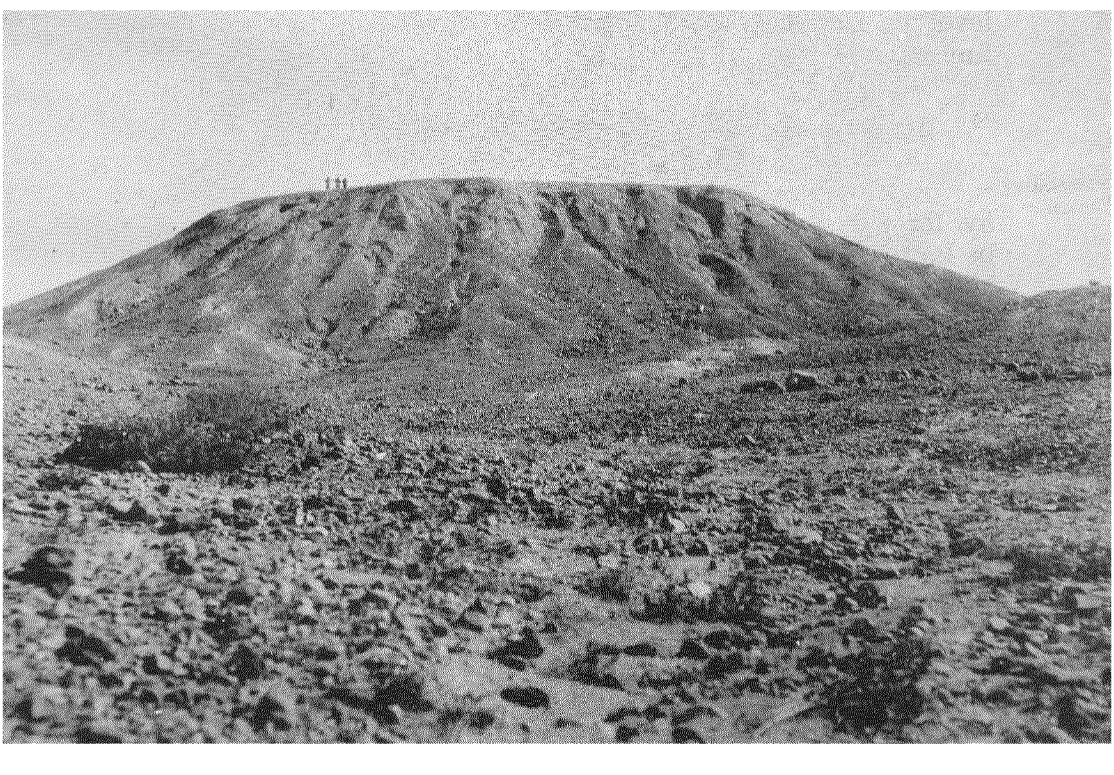
The western fort, *A*, shown in photograph, fig. XII., as seen from the south-east, still retains the foundations of its walls clearly at the north end and along the east face. Its length from north to south is circ. 180 feet with an average width of 40 feet. At the south-east corner the main wall is adjoined by a tower-like structure, *C* (seen in foreground of fig. XII.), built on a small terrace circ. 25 feet below the top of the extant walls. This tower

*Compare my *Sand-buried ruins of Khotan* (2nd edit.), pp. 243 *sqq.*

XII ANCIENT FORT NEAR LORALAI



XIII SHORGALAI MOUND, THAL



or bastion has on the north and east sides a semi-circular wall still standing to a height of 12 to 15 feet, and showing a narrow window or loophole 8 inches wide and about 3 feet high. The wall has here a thickness of close on 7 feet, and is constructed like the rest of the outer walls of both forts of roughly hewn blocks, from 1½ to 3 feet in length and 8 to 10 inches in height, set in regular courses. The material of the walls throughout was undoubtedly cut out of the rocky slopes of this or the neighbouring ridges, which show an easily cleaved white stone resembling chalky shale, bedded in well-defined horizontal strata. Whether this tower was meant to shelter a tank or possibly a well is not quite certain. The cutting-off of the rock face on its west side suggests this. On the top of the ridge within the circumvallated area the foundations of transverse walls, circ. 4 feet thick, probably intended to form rooms, are traceable in numerous places. The outer walls show here and in the eastern fort an average thickness of 6 feet.

The eastern ridge crowned by fort *A* is separated from the western one by a small valley closed on the south by a connecting *col* which at its point of greatest dip lies circ. 80 feet below the top of the western ridge. Following the crest line of the eastern ridge, fort *B* shows a central part, circ. 340 feet long, stretching from east to west, with an extension running due north from the western end for circ. 290 feet, and another at the opposite end directed to the north-east and about equally long. This extension is particularly narrow; but the average width of the interior is nowhere more than 40 feet, except in the middle, where the bastions *D* and *E* projecting on opposite faces extend the width to circ. 100 feet. The second of these bastions is rectangular and relatively well preserved with walls rising to circ. 15 feet; so also is the semi-circular bastion *G* at the south-west corner. The northern extension ends in a small outwork circ. 40 feet square, of which the walls rise still to circ. 10—12 feet; the north-eastern one, which occupies the highest part of the ridge, runs out in a ravelin-like point. Interior walls, much decayed, meant to divide small rooms, are traceable along part of the southern face and also within the extensions. A deep pit-like depression within the bastion *D* may possibly mark the position of a storage tank or well. Fort *B* of "Monastery Hill."

Of carved stone work I could find no trace, nor any remains which could possibly suggest a religious purpose such as the modern conventional designation "Monastery Hill" suggests. The scantiness of potsherds on and about the ridges was very striking, and seems to me to indicate an absence of prolonged and continuous occupation. The few fragments of painted pottery found showed simple ornamentation in red and black stripes. Seeing the position and character of the ruins, I believe we may recognize in them ancient forts built like Adh-i-Samudh to afford places of refuge in times of need for settlements in the plain below. I did not hear of any coins or other antiques having ever been found on these ridges.

The broad valley which extends from Duki south-eastwards to Thal and Chotiali, forms probably one of the largest cultivable areas within Baluchistan. I had already at Quetta received information of various mounds attesting early occupation near Duki, a large village and the head-quarters of the Duki Tahsil; but when enquiring about them, Mr. W. S. Davis, Political Agent, Loralai, was good enough to call my attention to the mound of *Shorgalai* in the direction of Thal, which, being far larger and not like the Duki mounds partly occupied by modern dwellings, promised more observations of interest. I reached it after a ten miles' ride south-east from Duki and at a distance of circ. 3 miles to the north-west of Thal Fort. The mound, known from a neighbouring locality also as that of *Dabalkot*, rises most conspicuously in the middle of a large plain, no part of which nearer than circ. 2 miles is at present under cultivation. Equally imposing by its height, circ. 80 feet above the surrounding plain, and by its other dimensions, it is certainly the largest ancient mound known to me on the Frontier. The photograph reproduced in fig. XIII. shows it as seen from the west. The area covered by the mound at its base is probably fully 500 yards long from north-west to south-east, while its maximum width, including the broad spurs projecting to the south and north-east, can scarcely be much less. Shorgalai Mound, Thal.

Configuration of mound.

The highest portion of the mound lies towards the north-west, and forms on its top a fairly level plateau measuring circ. 70 yards from north-west to south-east with a maximum breadth of circ. 65 yards. From this highest portion of the mound lower spurs descend with broad terrace-like shoulders to the north-east, south-east and south. These are separated from each other by two deep-cut ravines running east and south-east, which owe their origin entirely to the erosive section of rain. The ravines, which in most places bear the look of fantastically fissured gorges, permit an examination of the interior composition of the mound down to a level of circ. 60 feet from the top. The strata exposed by their often vertical sides show plainly that the whole mound consists of accumulated rubbish and clay such as must have been used in the construction of walls and houses. Following the south-east ravine down to its bottom I traced throughout strata containing ashes, bones and rubble. Pottery, which thickly strews the top of the mound as well as the surface of its lower spurs, diminishes in quantity as one descends, but I found small pieces of hard red pottery in undisturbed strata circ. 40 and 60 feet below the present top. The bottom of the ravine is throughout thickly covered with pottery débris, but, of course, most of this is likely to have been washed down from the top and out of higher layers.

Composition of strata.

Fragments of decorated pottery were found by me only on the top and on the surface of the north-west slope not far from the top. They were few in number, and showed simple patterns painted in black and red stripes or else crudely embossed or incised scrolls and similar ornaments. Potsherds with a light greenish-yellow glaze were plentiful on the top, but none were picked up from the lower strata. I conclude from this that the decorated pottery belongs to a relatively recent epoch. A mound of such height could have been formed only by the rubbish deposits of a long succession of periods of occupation, and it appears to me very probable that the earliest of these are altogether pre-historic. Large rough stones found on the top and on terraces of the mound may be the remains of small rubble-built towers or walls of relatively recent date erected on this commanding position. But the mass of dwellings successively built on the mound was constructed, no doubt, of clay only, and the crumbling away of this material has probably contributed more than any other cause to the rise in level. Of masonry of any kind neither the slopes nor the sides of the ravines disclosed a trace.

Extensive debris area.

According to Mr. Davis' information a pot with about 200 Muhammadan silver coins was some years ago discovered on the top, but none of them could now be produced for examination. Judging from the description given to me these pieces *may* have belonged to the Ghaznavi or Pathan dynasties. These coins would have been very useful for the purpose of approximately fixing the latest date up to which occupation of the mound continued. Otherwise finds of coins appear to be exceedingly rare, while those of beads are common. It is noteworthy as an indication of the large settlement which must at one time—not necessarily very remote—have clustered around this great mound that the plain at its foot for about half a mile in each direction is strewn with fragments of plain pottery and rubble. The view from the top is very extensive, comprising the greatest part of Thal, to which are counted at present some 13—14 villages. Excavations for manuring soil appear so far to have been carried on only to a limited extent at the foot of the mound.

Mounds of Chhalgarhi.

The old mounds of *Chhalgarhi* to which attention had first been called by Mr. Hughes Buller, c.s., in 1903, in a communication to the Director-General of Archæology, were examined by me at the conclusion of my Baluchistan tour. They are situated close to the village of Chhalgarhi in the barren plain of Kachh, which extends between Sibi and Jacobabad and over the greatest part of its area fully deserves the designation of a desert. Chhalgarhi, which was reached after a ride of circ. 8 miles to the south-west of Bellpat Station, is a fairly large village, though only a very small portion of the extensive area counted as village lands is in favourable seasons capable of irrigation, while the rest cannot be cultivated except after heavy rains which occur occasionally after the lapse of several years. At the time of my visit water was scanty even for drinking purposes.

The mounds lie to the north-east of the village, and are separated from it only by a shallow dry nullah through which at one time floods of the torrent bed locally known as Shor-Nadi used to make their way. The main mound extends in the direction from south-west to north-east for circ. 175 yards; its greatest breadth on the top is only about 20 yards, but there are several small terrace-like shoulders jutting out from its sides. To the west of this mound and parallel to it, at a distance of about 120 yards, there stretches a smaller mound, circ. 95 yards long and only 10 to 12 feet high. The level space between the two mounds, which seemed to be but little raised above the level of the neighbouring fields, is used as a burial ground by the people of Chhalgarhi. Their mud-built tombs occupy also part of the slopes of both mounds. The north-east end of these abut on an old flood bed of the Shor-Nadi, and in order to protect the burial ground an earth 'Band' has been raised connecting those two ends.

Composition of mounds.

Both mounds are thickly strewn with pottery débris, generally fragments of very small size, among which little figurines in burnt clay also turn up after rains. No structural remains are traceable anywhere on the surface of the mounds, but it is asserted that when a flood in the nullah last referred to had cut into the north-east end of the larger mound, remains of a wall built with bricks of a large size as well as a skeleton of extraordinary stature were laid bare. Tradition is very vague as to the time of this occurrence, widely different dates being mentioned by various grey-beards; no remains of the bricks could be shown to me nor the spot indicated with accuracy. The smaller mound falls off steeply towards the same nullah, and a cutting made here under my direction showed that the mound throughout consists of layers of clay, such as would now be used for the construction of village dwellings, mixed with potsherds, ashes and bones. I have every reason to assume that the composition of both mounds is substantially the same as disclosed by this trial excavation.

Ancient pottery of Chhalgarhi.

The pottery fragments, of which I examined a considerable quantity, are not distinguished for size (the largest piece only measured circ. 5 inches across) or exceptional hardness, but show more variety in decoration than observed elsewhere in Baluchistan. The most characteristic of the decorated pottery at this site shows a greyish clay, the outer surface of which is given an artificially roughened appearance by a network of incised wave lines running chiefly from the mouth of jars downwards. Horizontal bands of small incised roundels are also found in this class of pottery. Pottery of a light brown or grey colour decorated in roughly painted patterns with dark brown stripes and scrolls is also common. Red pottery with ornamental motives painted in black is rare; these ordinarily take the form of simple bands or check patterns. On one small piece I noticed a decorative band showing what might be meant for fishes, while another exhibits the remains of a leaf ornament in black and brown. One piece of red pottery was pierced by small holes, but without any regular pattern.

Clay figurines and plaques.

The fragments of clay bangles are very numerous, varying in thickness from one quarter inch to one inch. One large bangle of this thickness which a villager brought to me, measured 7 inches across and was manifestly not meant for wear. The bangles usually show a light brown colour with a simple fern-like ornament on the outside. Clay figurines seem to be found frequently, but their variety is apparently not great; their colour varies from light grey to terra-cotta. Small plaques representing very coarsely modelled female figures, with much exaggerated heads, and usually broken below the diminutive waists, are common. They measure ordinarily 1—1½ inches from the waist to the wig-like head-dress. Two much-injured figurines seem to show male heads surmounted by high conical caps as of sheepskin. The largest figurine I saw represents a seated or kneeling woman, and measures 6 inches in height, being broken above the knees. The modelling of the head is coarse here too, though less grotesque than in the small plaques. Animals are represented by a few bulls and, curiously enough, also pigs.

According to the village headmen's statements some copper coins were found a few years ago with legends which to them looked like Nagari, and which some Brahmans pretended to read. No coins have since turned up, and

finds are apparently always rare. It is clear that the mound contains the débris accumulations of a pre-Muhammadan settlement, probably corresponding in character to the present Chhalgarhi; but there is no evidence of any high antiquity. As the soil immediately to the south of the main mound is pure clay, without any trace of pottery or similar débris, it may be safely assumed that the height of the mounds represents approximately the original height of the accumulations. In the absence of regular irrigation no great rise in the ground level can have occurred, while on the other hand the old established custom of burying on the slopes of the mounds has evidently preserved the latter from being lowered by diggings for manuring soil. Taking into account also the scarcity of rainfall in this region, it seems improbable that the height of these mounds could have been very much greater when they were first abandoned by dwellings, perhaps about the time of the final Muhammadan conquest.

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